

INSTITUTE OF GOVERNMENT
STUDIES LIBRARY
APR 6 2001

UNIVERSITY OF CALIFORNIA

CITY OF MALIBU GENERAL PLAN

November 1995

Credits

City of Malibu City Council

Joan House, Mayor
Jeff Kramer, Councilmember
Jeff Jennings, Councilmember
John Harlow, Councilmember
Carolyn Van Horn, Councilmember

City of Malibu Staff

David Carmany, City Manager
Christi Hogin, City Attorney
Mark Lorimer, Assistant City Manager
Joyce Parker-Bozylinski, AICP, Planning Director
John Clement, Director of Public Works
Victor Peterson, Building Official
Cassie Walter, Recreation Coordinator
Jeffrie Madland, Legal Assistant
Robert Benard, Former Planning Director
Michael Jenkins, Former City Attorney

General Plan Task Force (1994)

Susan Shaw, Chairperson	Lucile Keller, Recording Secretary
Michael Allen	Clint Ancker
Frank Angel	Audrey Beatty
Marty Cooper	Sarah Dixon
Pam Eilerson	Jack Foley
Emily Harlow	Charlene Kabrin
Art London	John Perenchio
Jo Ruggles	John Wall
Russ Wolpert	

General Plan Task Force (1993)

John Wall, Co-Chairperson	Marty Cooper, Co-Chairperson
Lucile Keller, Recording Secretary	Michael Allen
Clint Ancker	Frank Angel
Edward Albert, Jr.	Audrey Beatty
Sharon Barovsky	Marty Cooper
Sarah Dixon	Pam Eilerson
Jack Foley	Emily Harlow
Charlene Kabrin	Dave Kagon
Art London	John Perenchio
Carol Rapf	Jo Ruggles
Gil Segal	Libby Sparks
John Wall	Russ Wolpert

Former General Plan Task Force Members (1990 - 1992)

Mary Culbert	Martin Duff
Faye Hove	Paul Grisanti
Joan House	Jeff Jennings
Jeff Kramer	Ed Niles
Pete Tompkins	Sarah Wan, Chairperson (1991)

Preparers of the Malibu General Plan

Harland Bartholomew & Associates, Inc.

Frank B. Wein, AICP
Shayne Reich Lipsey
Paulette (Polly) M. Carolin, AICP
Traci Robinson-Michel (former employee)
Kevin Maher

Project Director
Project Planner
Project Planner
Project Planner
Project Planner

Barton-Aschman Associates, Inc.

Brad Williams
Pam Hannah

Senior Traffic Engineer
Traffic Engineer

Hannan Geo-Technical, Inc.

Dennis Hannan

Geo-technical Consultant

Moore, Iacofano & Goltsman

Danile Iacofano , AICP, Ph.D.
Jim Oswald

Public Participation
Public Participation

Myers, Widders & Gibson

Katherine Stone

Land Use Attorney

Cotton/Beland/Associates

Karen Warner

Housing Consultant

Richards, Watson & Gershon

Laurence S. Wiener
Michael G. Colantuono

Environmental Attorney
Housing Law Attorney

Shute, Mihaly & Wienberger

Mark I. Wienberger
Ellison Folk

Land Use Attorney
Land Use Attorney

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ENGLISHTON, NEW JERSEY, APPROVING THE GENERAL PLAN AMENDMENT NO. 2017-07, AND ADOPTING THE CITY CHARTER

WHEREAS, the City Council of the City of Englishton, New Jersey, has adopted the

City Charter, which was adopted by the City Council on 10/10/17.

WHEREAS, the City Council of the City of Englishton, New Jersey, has adopted the

City Charter, which was adopted by the City Council on 10/10/17.

WHEREAS, the City Council of the City of Englishton, New Jersey, has adopted the

City Charter,

which was

adopted by

**GENERAL PLAN
AMENDMENTS**

WHEREAS, the City Council of the City of Englishton, New Jersey, has adopted the

City Charter, which was adopted by the City Council on 10/10/17.

WHEREAS, the City Council of the City of Englishton, New Jersey, has adopted the

GENERAL PLAN AMENDMENTS

WHEREAS, the City Council of the City of Englishton, New Jersey, has adopted the

City Charter, which was adopted by the City Council on 10/10/17.

GENERAL PLAN AMENDMENTS

WHEREAS, the City Council of the City of Englishton, New Jersey, has adopted the

City Charter, which was adopted by the City Council on 10/10/17.

City Charter, which was

adopted by the City Council on 10/10/17.

Appendix A: General Plan

1. General Plan
2. General Plan
3. General Plan
4. General Plan
5. General Plan
6. General Plan

7. General Plan
8. General Plan
9. General Plan
10. General Plan
11. General Plan
12. General Plan

13. General Plan
14. General Plan
15. General Plan
16. General Plan
17. General Plan
18. General Plan

19. General Plan
20. General Plan
21. General Plan
22. General Plan
23. General Plan
24. General Plan

25. General Plan
26. General Plan
27. General Plan
28. General Plan
29. General Plan
30. General Plan

31. General Plan
32. General Plan
33. General Plan
34. General Plan
35. General Plan
36. General Plan

37. General Plan
38. General Plan
39. General Plan
40. General Plan
41. General Plan
42. General Plan

43. General Plan
44. General Plan
45. General Plan
46. General Plan
47. General Plan
48. General Plan

49. General Plan
50. General Plan
51. General Plan
52. General Plan
53. General Plan
54. General Plan

55. General Plan
56. General Plan
57. General Plan
58. General Plan
59. General Plan
60. General Plan

61. General Plan
62. General Plan
63. General Plan
64. General Plan
65. General Plan
66. General Plan

67. General Plan
68. General Plan
69. General Plan
70. General Plan
71. General Plan
72. General Plan

73. General Plan
74. General Plan
75. General Plan
76. General Plan
77. General Plan
78. General Plan

79. General Plan
80. General Plan
81. General Plan
82. General Plan
83. General Plan
84. General Plan

85. General Plan
86. General Plan
87. General Plan
88. General Plan
89. General Plan
90. General Plan

91. General Plan
92. General Plan
93. General Plan
94. General Plan
95. General Plan
96. General Plan

GENERAL PLAN
ADDITIONAL

RESOLUTION NO. 00-57

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MALIBU
APPROVING GENERAL PLAN AMENDMENTS 99-002 - BLANK PAR
E, LLC AND 00-001 - CITY INITIATED**

WHEREAS, an application for a General Plan Amendment 99-002 was duly filed by:

APPLICANT/OWNER: Blank Par E, LLC
LOCATION: 27311 and 27315 Winding Way
ACREAGE: 11.7± Acres APN(s): 4460-002-007

WHEREAS, an application for a General Plan Amendment 00-001 was duly filed by:

APPLICANT: City of Malibu
LOCATION: 19334 Pacific Coast Highway
ACREAGE: 0.2± Acres APN: 4449-005-008

WHEREAS, the City of Malibu is permitted by state law to amend each of its required general plan elements up to four times per year and this amendment is the second amendment of the Land Use Element Map; and,

WHEREAS, a public notice was published in The Malibu Surfside News giving notice of a public hearing to be held by the City Council on General Plan Amendments 99-015 and 00-002. The public hearing was held before the City Council on the 11th day of September, 2000, at the hour of 7:30 p.m., with all testimony received being made a part of the public record.

NOW, THEREFORE, in consideration of the evidence contained in the Staff Report and in consideration of the evidence received at the hearing, and for the reasons discussed by the Council at said hearing, the City Council now finds, determines and resolves as follows:

SECTION 1: Environmental Findings.

- A. Initial Studies were completed in compliance with the California Environmental Quality Act identifying potentially significant environmental effects that the project may have; and
- B. The Planning Commission independently reviewed, analyzed, considered and adopted Negative Declarations with de minimus findings in making its decision on the projects, and the Negative Declarations with de minimus findings reflect the independent judgement of the City of Malibu; and

SECTION 2: General Plan Amendment

- A. An amendment from Rural Residential (RR-20) to Rural Residential (RR-5) as shown in Exhibit B attached.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SEATTLE
APPROVING THE CITY OF SEATTLE'S POLICY ON
THE CITY OF SEATTLE - CITY OF SEATTLE

WHEREAS, the City of Seattle has a long history of providing a high quality of life for its citizens;

AND WHEREAS, the City of Seattle has a long history of providing a high quality of life for its citizens;

WHEREAS, the City of Seattle has a long history of providing a high quality of life for its citizens;

AND WHEREAS, the City of Seattle has a long history of providing a high quality of life for its citizens;

WHEREAS, the City of Seattle has a long history of providing a high quality of life for its citizens;

WHEREAS, the City of Seattle has a long history of providing a high quality of life for its citizens;

WHEREAS, the City of Seattle has a long history of providing a high quality of life for its citizens;

SECTION 1. Findings and Conclusions

1. The City of Seattle has a long history of providing a high quality of life for its citizens;

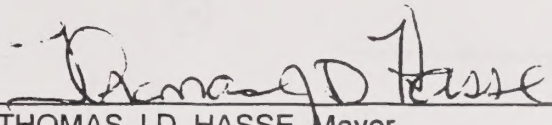
2. The City of Seattle has a long history of providing a high quality of life for its citizens;

SECTION 2. General Policy Statement

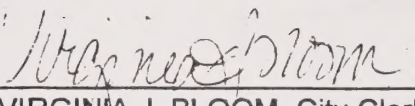
3. The City of Seattle has a long history of providing a high quality of life for its citizens;

B. An amendment from Public Open Space (POS) to Single Family – Medium Density (SFM) as shown in Exhibit A attached.

PASSED, APPROVED, AND ADOPTED this 11th day of September, 2000.

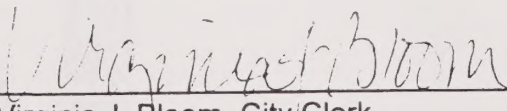

THOMAS J.D. HASSE, Mayor

ATTEST:


VIRGINIA J. BLOOM, City Clerk

I CERTIFY THAT THE FOREGOING RESOLUTION NO. 00-57 was passed and adopted by the City Council of the City of Malibu at the regular meeting held on the 11th day of September, 2000, by the following vote:

AYES:	5	Councilmembers: Jennings, Kearsley, Barovsky, House and Hasse
NOES:	0	
ABSENT:	0	
ABSTAIN:	0	


Virginia J. Bloom, City Clerk
(Seal)

Very truly yours,
Special Agent in Charge, Bureau of Land Management

[Signature]
Special Agent in Charge

W-100

[Signature]
Special Agent in Charge, Bureau of Land Management

2. The undersigned hereby certifies that the foregoing is a true and correct copy of the original as the same appears in the records of the Department of the Interior, Bureau of Land Management, Washington, D.C.

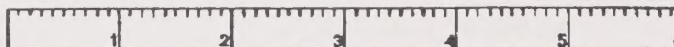
Very truly yours,
Special Agent in Charge, Bureau of Land Management

[Signature]
Special Agent in Charge, Bureau of Land Management

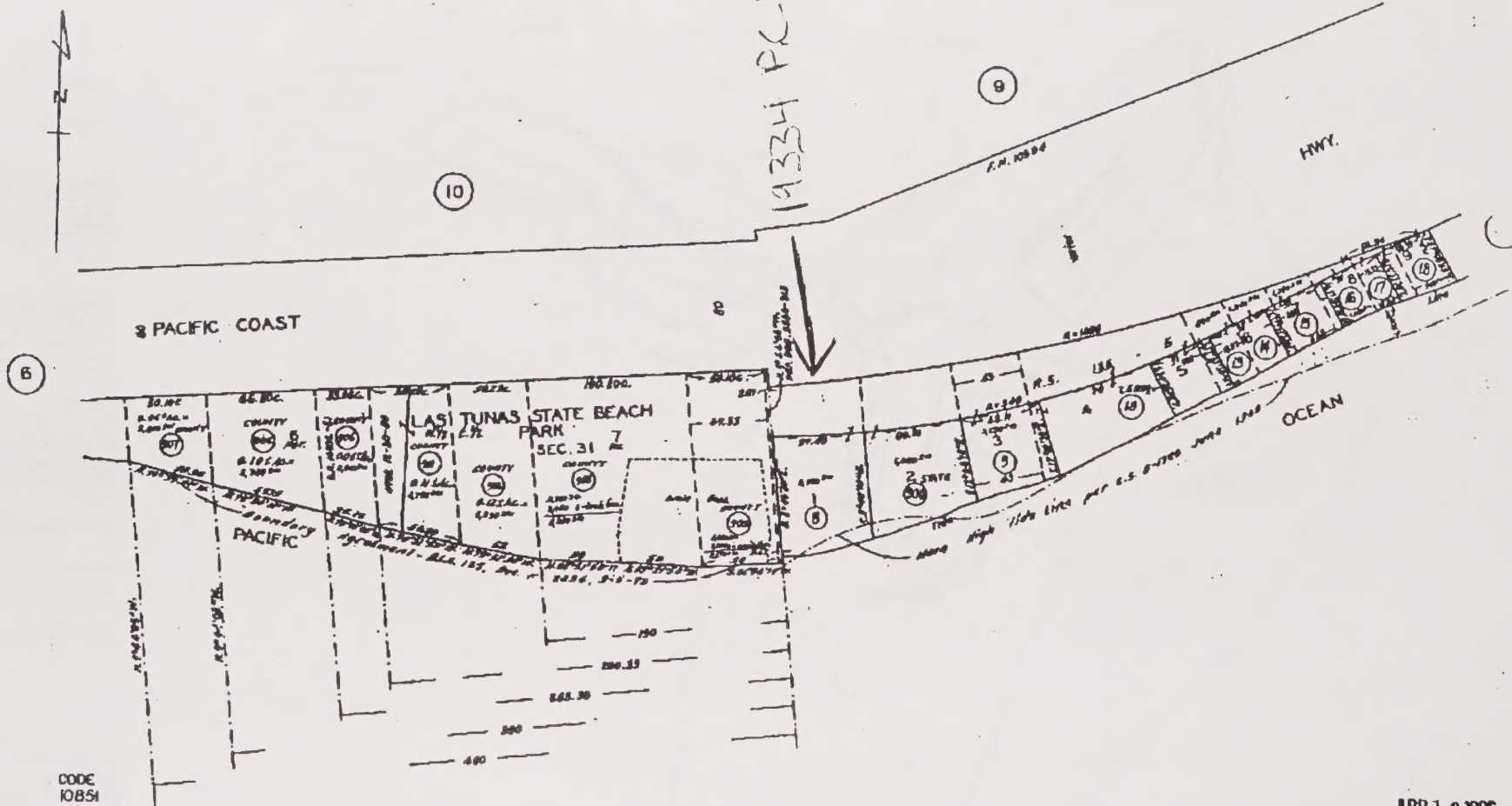
4449 | 5
SCALE 1" = 60'

1996

TRW-REDI



SCALE 1" = 60'



CODE 10854

FOR PREV. ASSESSOR SEE 4450-27 & 28

T.I.S., R. 16 W.

LICENSED SURVEYOR'S MAP

L.S. 26-43-44

APR 1 9 1996

Distances shown measured at right angles to M line lot 1, L.S. 26-43-44, are actually measured parallel to M line lot 6, Sec. 31, T.15., R. 16 W., from cornerwise line per D.D.S. 5886-3/3

ASSESSOR'S MAP
COUNTY OF LOS ANGELES, CALIF.

Exhibit A

1000

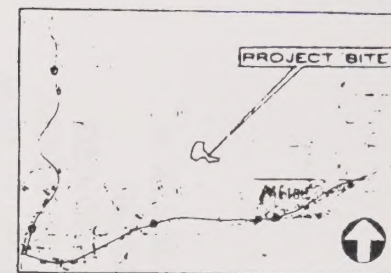
1000



1000

1000

SCALE 1° - 90°



VICINITY MAP
NO SCALE

APPLICATIONS

BLANK PAGE, LLC

71 APR 25 1968

LEGAL DESCRIPTION

[illegible]

1. REVIEW OF THE RECORD OF THE UNITED STATES DEPARTMENT OF AGRICULTURE
 2. FOR THE YEAR 1900
 3. AND THE YEAR 1901
 4. AND THE YEAR 1902
 5. AND THE YEAR 1903
 6. AND THE YEAR 1904
 7. AND THE YEAR 1905
 8. AND THE YEAR 1906
 9. AND THE YEAR 1907
 10. AND THE YEAR 1908
 11. AND THE YEAR 1909
 12. AND THE YEAR 1910
 13. AND THE YEAR 1911
 14. AND THE YEAR 1912
 15. AND THE YEAR 1913
 16. AND THE YEAR 1914
 17. AND THE YEAR 1915
 18. AND THE YEAR 1916
 19. AND THE YEAR 1917
 20. AND THE YEAR 1918
 21. AND THE YEAR 1919
 22. AND THE YEAR 1920
 23. AND THE YEAR 1921
 24. AND THE YEAR 1922
 25. AND THE YEAR 1923
 26. AND THE YEAR 1924
 27. AND THE YEAR 1925
 28. AND THE YEAR 1926
 29. AND THE YEAR 1927
 30. AND THE YEAR 1928
 31. AND THE YEAR 1929
 32. AND THE YEAR 1930
 33. AND THE YEAR 1931
 34. AND THE YEAR 1932
 35. AND THE YEAR 1933
 36. AND THE YEAR 1934
 37. AND THE YEAR 1935
 38. AND THE YEAR 1936
 39. AND THE YEAR 1937
 40. AND THE YEAR 1938
 41. AND THE YEAR 1939
 42. AND THE YEAR 1940
 43. AND THE YEAR 1941
 44. AND THE YEAR 1942
 45. AND THE YEAR 1943
 46. AND THE YEAR 1944
 47. AND THE YEAR 1945
 48. AND THE YEAR 1946
 49. AND THE YEAR 1947
 50. AND THE YEAR 1948
 51. AND THE YEAR 1949
 52. AND THE YEAR 1950
 53. AND THE YEAR 1951
 54. AND THE YEAR 1952
 55. AND THE YEAR 1953
 56. AND THE YEAR 1954
 57. AND THE YEAR 1955
 58. AND THE YEAR 1956
 59. AND THE YEAR 1957
 60. AND THE YEAR 1958
 61. AND THE YEAR 1959
 62. AND THE YEAR 1960
 63. AND THE YEAR 1961
 64. AND THE YEAR 1962
 65. AND THE YEAR 1963
 66. AND THE YEAR 1964
 67. AND THE YEAR 1965
 68. AND THE YEAR 1966
 69. AND THE YEAR 1967
 70. AND THE YEAR 1968
 71. AND THE YEAR 1969
 72. AND THE YEAR 1970
 73. AND THE YEAR 1971
 74. AND THE YEAR 1972
 75. AND THE YEAR 1973
 76. AND THE YEAR 1974
 77. AND THE YEAR 1975
 78. AND THE YEAR 1976
 79. AND THE YEAR 1977
 80. AND THE YEAR 1978
 81. AND THE YEAR 1979
 82. AND THE YEAR 1980
 83. AND THE YEAR 1981
 84. AND THE YEAR 1982
 85. AND THE YEAR 1983
 86. AND THE YEAR 1984
 87. AND THE YEAR 1985
 88. AND THE YEAR 1986
 89. AND THE YEAR 1987
 90. AND THE YEAR 1988
 91. AND THE YEAR 1989
 92. AND THE YEAR 1990
 93. AND THE YEAR 1991
 94. AND THE YEAR 1992
 95. AND THE YEAR 1993
 96. AND THE YEAR 1994
 97. AND THE YEAR 1995
 98. AND THE YEAR 1996
 99. AND THE YEAR 1997
 100. AND THE YEAR 1998
 101. AND THE YEAR 1999
 102. AND THE YEAR 2000
 103. AND THE YEAR 2001
 104. AND THE YEAR 2002
 105. AND THE YEAR 2003
 106. AND THE YEAR 2004
 107. AND THE YEAR 2005
 108. AND THE YEAR 2006
 109. AND THE YEAR 2007
 110. AND THE YEAR 2008
 111. AND THE YEAR 2009
 112. AND THE YEAR 2010
 113. AND THE YEAR 2011
 114. AND THE YEAR 2012
 115. AND THE YEAR 2013
 116. AND THE YEAR 2014
 117. AND THE YEAR 2015
 118. AND THE YEAR 2016
 119. AND THE YEAR 2017
 120. AND THE YEAR 2018
 121. AND THE YEAR 2019
 122. AND THE YEAR 2020
 123. AND THE YEAR 2021
 124. AND THE YEAR 2022
 125. AND THE YEAR 2023
 126. AND THE YEAR 2024
 127. AND THE YEAR 2025
 128. AND THE YEAR 2026
 129. AND THE YEAR 2027
 130. AND THE YEAR 2028
 131. AND THE YEAR 2029
 132. AND THE YEAR 2030
 133. AND THE YEAR 2031
 134. AND THE YEAR 2032
 135. AND THE YEAR 2033
 136. AND THE YEAR 2034
 137. AND THE YEAR 2035
 138. AND THE YEAR 2036
 139. AND THE YEAR 2037
 140. AND THE YEAR 2038
 141. AND THE YEAR 2039
 142. AND THE YEAR 2040
 143. AND THE YEAR 2041
 144. AND THE YEAR 2042
 145. AND THE YEAR 2043
 146. AND THE YEAR 2044
 147. AND THE YEAR 2045
 148. AND THE YEAR 2046
 149. AND THE YEAR 2047
 150. AND THE YEAR 2048
 151. AND THE YEAR 2049
 152. AND THE YEAR 2050
 153. AND THE YEAR 2051
 154. AND THE YEAR 2052
 155. AND THE YEAR 2053
 156. AND THE YEAR 2054
 157. AND THE YEAR 2055
 158. AND THE YEAR 2056
 159. AND THE YEAR 2057
 160. AND THE YEAR 2058
 161. AND THE YEAR 2059
 162. AND THE YEAR 2060
 163. AND THE YEAR 2061
 164. AND THE YEAR 2062
 165. AND THE YEAR 2063
 166. AND THE YEAR 2064
 167. AND THE YEAR 2065
 168. AND THE YEAR 2066
 169. AND THE YEAR 2067
 170. AND THE YEAR 2068
 171. AND THE YEAR 2069
 172. AND THE YEAR 2070
 173. AND THE YEAR 2071
 174. AND THE YEAR 2072
 175. AND THE YEAR 2073
 176. AND THE YEAR 2074
 177. AND THE YEAR 2075
 178. AND THE YEAR 2076
 179. AND THE YEAR 2077
 180. AND THE YEAR 2078
 181. AND THE YEAR 2079
 182. AND THE YEAR 2080
 183.

CONFIDENTIAL

[illegible]

EAST-1100K E-11A-15

[illegible]

PARCEL MAP NO. 25498

Find the sum of the first 10 terms of the series.

LIST OF DRAWINGS

<u>SHEET NO</u>	<u>DESCRIPTION</u>
1	PAVING MAP VISITS MAP. AND TERRAIN AND OTHER NOTES
2	NO. 16 AIR TERMINAL FURN 1000000 AND OTHER MAP

SHEET 1 OF 3
TENTATIVE PARCEL MAP FOR
BLANK PAR E, LLC

NO 99007 DATE MAR 12 1995

Bentley Systems, Inc.



Servtec Consultants Inc.

LEONARD BENTLEY



RESOLUTION NO. 99-69

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MALIBU DENYING GENERAL PLAN AMENDMENT 99-001(B) TO CHANGE THE LAND USE DESIGNATION FROM RR-20 (RURAL RESIDENTIAL - ONE UNIT PER TWENTY ACRES) TO RR-5 (RURAL RESIDENTIAL - ONE UNIT PER FIVE ACRES) FOR A 125-ACRE PROPERTY LOCATED ON THE NORTHEAST SIDE OF LATIGO CANYON ROAD, APPROXIMATELY 4,000 FEET FROM THE LATIGO CANYON ROAD / PACIFIC COAST HIGHWAY INTERSECTION, FOR THE RUBENS FAMILY TRUST

WHEREAS, the City of Malibu has adopted a General Plan, including Land use Implementation Measure 90, as follows:

"Establish an administrative procedures and guidelines to assure that general plan standards, including land use policy map designations, are applied consistent with applicable laws, including the California and United States Constitutions. This procedure shall include review of appropriate density at the request of the property owner in areas where improvements were installed pursuant to a County initiated assessment district."

and

WHEREAS, the City of Malibu General Plan Land Use Map designates the 125-acre property located on the northeast side of Latigo Canyon Road, approximately 4,000 feet from the Latigo Canyon Road / Pacific Coast Highway intersection as RR-20 (Rural Residential - One Dwelling Unit per 20 Acres), and

WHEREAS, in order to provide for evaluation of applications for General Plan Land Use Map amendments under the Land Use Implementation Measure 90, the City Attorney and Planning Department adopted, on May 13, 1999, Guidelines for Evaluation of General Plan Policies and Land Use Designations, and

WHEREAS, on October 17, 1997, the City received a request from the Rubens Family Trust, owners of said property, to amend the General Plan Land Use Map designation for the subject property from RR-20 to RR-5, based on the payment of assessments to Los Angeles County (Improvement No. 2277), and

WHEREAS, on September 27, 1999, the City Council conducted a public hearing following notification in the prescribed manner, and at which hearing the Council considered a staff report, public testimony and other related information.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF MALIBU DOES HEREBY RESOLVE:

Section 1. The City Council of the City of Malibu hereby adopts the following findings of fact regarding the requested General Plan Amendment:

A REPORT OF THE COMMISSIONER OF THE GENERAL LAND OFFICE, IN RESPONSE TO A RESOLUTION OF THE HOUSE OF REPRESENTATIVES, PASSED MAY 1, 1870, RELATIVE TO THE LANDS BELONGING TO THE UNITED STATES, AND TO THE LANDS BELONGING TO THE SEVERAL STATES.

WASHINGTON: GOVERNMENT PRINTING OFFICE: 1870.

THE COMMISSIONER OF THE GENERAL LAND OFFICE, IN RESPONSE TO A RESOLUTION OF THE HOUSE OF REPRESENTATIVES, PASSED MAY 1, 1870, RELATIVE TO THE LANDS BELONGING TO THE UNITED STATES, AND TO THE LANDS BELONGING TO THE SEVERAL STATES.

WASHINGTON: GOVERNMENT PRINTING OFFICE: 1870.

THE COMMISSIONER OF THE GENERAL LAND OFFICE, IN RESPONSE TO A RESOLUTION OF THE HOUSE OF REPRESENTATIVES, PASSED MAY 1, 1870, RELATIVE TO THE LANDS BELONGING TO THE UNITED STATES, AND TO THE LANDS BELONGING TO THE SEVERAL STATES.

WASHINGTON: GOVERNMENT PRINTING OFFICE: 1870.

THE COMMISSIONER OF THE GENERAL LAND OFFICE, IN RESPONSE TO A RESOLUTION OF THE HOUSE OF REPRESENTATIVES, PASSED MAY 1, 1870, RELATIVE TO THE LANDS BELONGING TO THE UNITED STATES, AND TO THE LANDS BELONGING TO THE SEVERAL STATES.

WASHINGTON: GOVERNMENT PRINTING OFFICE: 1870.

- A. The Rubens Family trust has requested an amendment of the Malibu General Plan Land Use Map to change the land use designation of its property from Rural Residential - 1 Unit per 20 Acres to Rural Residential - 1 Unit per 5 Acres. The Rubens' property contains approximately 125 acres located on the inland (north-east) side of Latigo Canyon Road, approximately 4.000 feet (3/4 mile) from the Latigo Canyon Road / Pacific Coast Highway intersection.
- B. The Rubens' purchased the subject property in 1954. In the 1960's, Los Angeles County established an assessment district for properties in Latigo Canyon (including the subject property) to pay for and install a water line and related improvements. The Rubens originally supported the assessment district, and signed the petition in support of establishing the district. The County accepted the petition for the assessment district on October 22, 1963. On November 19, 1963, the County directed the Los Angeles County Waterworks District to prepare plans and specifications for the assessment district and on November 26, 1963, the County authorized the acquisition of rights of way for the installation of improvements.
- C. It was not until 1965, after the County had initially approved the assessment district, that the Rubens' objected to the formation of the District. Reasons cited by the Rubens' in opposition to the assessment district were increased cost and the belief that the land in the district was not suitable for residential development due to its "extremely hilly terrain." (June 9, 1965 letter from George Rubens to Los Angeles County Board of Supervisors).
- D. The County reapproved the assessment district, including the Rubens' property, in 1965 and assessed the Rubens' land for fifteen years. The assessment was established based on the total acreage of the property (personal communication with George Papik, Los Angeles County Waterworks District 29) and the total assessment paid by the Rubens' was \$90,630.00. During this time the property was designated by Los Angeles County Regional Planning as A-1-1 (Agricultural - One Dwelling Unit per Acre).
- E. Because no specific development plans had been submitted at the time that the assessment district was formed, sizing of the facilities for the assessment district was based on the zoning in existence at the time the assessment district was formed. However, the cost of the assessments was assessed on a per acre basis and allocated without regard to the development potential of individual parcels. The Los Angeles County Water District indicates that the facilities installed under the assessment district were sized according to the development standards of the

The Board of Directors of the Corporation is composed of seven members, three of whom are independent directors. The Board of Directors is responsible for the overall management and control of the Corporation, and for the appointment and removal of the officers and directors of the Corporation. The Board of Directors is also responsible for the approval of the Corporation's financial statements and the declaration of dividends.

The Board of Directors of the Corporation is composed of seven members, three of whom are independent directors. The Board of Directors is responsible for the overall management and control of the Corporation, and for the appointment and removal of the officers and directors of the Corporation. The Board of Directors is also responsible for the approval of the Corporation's financial statements and the declaration of dividends.

The Board of Directors of the Corporation is composed of seven members, three of whom are independent directors. The Board of Directors is responsible for the overall management and control of the Corporation, and for the appointment and removal of the officers and directors of the Corporation. The Board of Directors is also responsible for the approval of the Corporation's financial statements and the declaration of dividends.

The Board of Directors of the Corporation is composed of seven members, three of whom are independent directors. The Board of Directors is responsible for the overall management and control of the Corporation, and for the appointment and removal of the officers and directors of the Corporation. The Board of Directors is also responsible for the approval of the Corporation's financial statements and the declaration of dividends.

The Board of Directors of the Corporation is composed of seven members, three of whom are independent directors. The Board of Directors is responsible for the overall management and control of the Corporation, and for the appointment and removal of the officers and directors of the Corporation. The Board of Directors is also responsible for the approval of the Corporation's financial statements and the declaration of dividends.

1960's and would not be adequate to serve property zoned for 125 units under current standards.

- F. In 1981 Los Angeles County adopted the Malibu/Santa Monica Mountains Area Plan, which is part of the County's local coastal plan for that area. This plan designated the Rubens property for low density residential development, primarily 1 unit per 20 acres. The Coastal Commission certified the County's local coastal plan in 1986.
- G. In 1995, the City Council adopted the Malibu General Plan, including a designation of the site as RR-20 (Rural Residential - One Dwelling Unit per 20 Acres). The City's land use designation of RR-20 for plaintiff's property is based on the City's determination that high density residential development was not appropriate for the hilly terrain that characterize the area where the Rubens' property is located.
- H. At no time from 1954 until the present application has a development proposal been presented by the Rubens to either Los Angeles County or the City of Malibu.
- I. The City requested that Mason & Mason, California Certified Real Estate Appraisers, review the Rubens's application for a redesignation of their property to RR-5. Mason & Mason determined that, when subject to realistic assumptions about development costs and contingencies, the Rubens' application was not economically viable. According to Mason & Mason, the development proposed by the Rubens' was too speculative to produce a reliable development scenario (August 30, 1999 letter from Mason & Mason to Ellison Folk, Shute, Mihaly & Weinberger).
- J. Mason & Mason also prepared an analysis of the economic viability of other reasonable development proposals for the Rubens's property (August 31, 1999 letter from Mason & Mason to Ellison Folk, Shute, Mihaly & Weinberger, Re: Alternate Proposals). Based on this analysis, Mason & Mason determined that a development proposal calling for the development of the four legal lots on the applicant's property would yield a positive land value and a profit of approximately 6 percent on the applicant's original investment, including assessment payments (August 31 letter from Mason & Mason to Ellison Folk, Re: Analysis of Economic Viability of Development Proposals.) Under the Mason & Mason development scenario, the applicant would not build the homes, but would prepare the lots for development and sell the property for home construction by others.

1. The first part of the document is a list of the names of the people who were present at the meeting.

2. The second part of the document is a list of the names of the people who were absent from the meeting.

3. The third part of the document is a list of the names of the people who were present at the meeting.

4. The fourth part of the document is a list of the names of the people who were absent from the meeting.

5. The fifth part of the document is a list of the names of the people who were present at the meeting.

6. The sixth part of the document is a list of the names of the people who were absent from the meeting.

7. The seventh part of the document is a list of the names of the people who were present at the meeting.

- K. Mason & Mason also determined that the Rubens's property retains significant value in its current state and could be sold at a profit for residential use without the installation of any further improvements by the Rubens' (October 29, 1999 letter from Mason & Mason to Ellison Folk, Shute, Mihaly & Weinberger.). According to this most recent analysis, the present value of Ruben's property in its current state is between \$1,200,000 and \$1,572,000, which yields a return on the Rubens's original investments in the property, including the payment of assessments, of between 5-6 percent.
- L. Based on historic rates of return for investments, a return of 5-6 percent is a reasonable rate of return.
- M. Los Angeles County Department of Public Works continues to administer and maintain the water improvements as part of Waterworks District 29, to which the applicant has paid water assessments. The City has consulted with County Public Works to determine how the assessments paid from 1966 to 1981 would be considered in the calculation of water fees today. Because the applicant has paid some assessments for water service, he is entitled to water from the water main built by the assessment district. The Waterworks District prepared estimates of water charges for a four-lot development under the RR-20 designation, and a 13 lot development, as offered by the applicant. See Exhibit C. The Public Works Department determined the amount of money it would cost to provide water for each of these developments. These cost estimates vary depending on whether the applicant would use public or private water mains and whether it intended to irrigate only one acre per lot developed or the entire 125 acres. The Department also gave credit to the property owner for assessments paid in previous years according to the Department's standard formula.
- N. Under each of these scenarios, the cost of supplying water to develop the property exceeds the cost of assessments already paid. Thus, the assessments paid between 1965 and 1981 would not be sufficient to cover the current cost of irrigating only four acres for a four lot development, nor would it be sufficient to cover the current cost of irrigating 13 acres for a 13 lot development.
- O. The City's RR-20 land use designation allows the Rubens's property to be used for residential use and it does not prohibit the Rubens' from using water improvements that were installed by Los Angeles County. In addition, the applicant retains the right to irrigate all 125 acres of its property as a result of the prior assessment, and thus retains the right to make full use of the assessments

paid.

- P. According to the L. A. County Waterworks District, if the applicant had not been part of the original assessment district and therefore had paid no assessments, it would not be entitled to water service from the water mains serving Latigo Canyon. Rather, the applicant would be required to construct its own water main from Pacific Coast Highway to its property. Mr. Papik estimated the cost of constructing a water line from Pacific Coast Highway at approximately \$150 per lineal foot. The subject property is approximately 4,000 feet up Latigo Canyon Road from the water main on Pacific Coast Highway; at a cost of \$150 per lineal foot, the cost of building a water main to the property would be approximately \$600,000. This cost would be far greater than the present value of the assessments already paid.
- Q. Without water, the applicant's property cannot be developed. According to staff conversations with Mason & Mason, the assessments paid and the resulting availability of water to the property make the property substantially more valuable than it would be if no assessments had been paid. Because the applicant will be able to develop its property, and the cost of such development would be higher (no matter how many units were allowed) in the absence of the previously paid assessments, the RR-20 land use designation provides the applicant with the beneficial use of the assessments paid.
- R. The City's RR-20 land use designation for the Rubens's property does not deny the Rubens's of economically viable use of their land, it does not interfere with the Rubens's reasonable investment backed expectations, and it does not deprive the Rubens' of beneficial use of the assessments paid to Los Angeles County.

Section 2. The City Council of the City of Malibu hereby denies General Plan Amendment 99-001 (B), a request to change the land use designation of the subject property from RR-20 to RR-5.

Dear [Name]:

I am writing to you in response to your letter of [Date]. I am sorry that I cannot give you a more definitive answer at this time. The situation is still developing, and I need more information before I can make a final decision. I will contact you again as soon as I have more news.

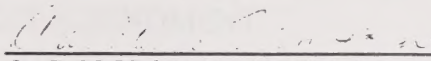
I understand your concerns, and I appreciate your patience. I will do my best to resolve this as quickly as possible. I will keep you updated on any progress.

I am sorry for any inconvenience this may cause. I will make every effort to complete this as soon as possible.

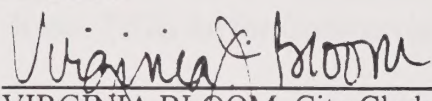
Sincerely,
[Signature]

Section 3. The City Clerk shall certify the adoption of this Resolution.

PASSED, APPROVED AND ADOPTED this 8th day of November, 1999.


CAROLYN VAN HORN, Mayor

ATTEST:


VIRGINIA BLOOM, City Clerk

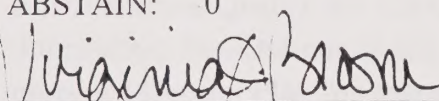
I CERTIFY THAT THE FOREGOING RESOLUTION NO. 99-69 was passed and adopted by the City Council of the City of Malibu at the regular meeting thereof held on the 8th day of November, 1999, by the following vote:

AYES: 5 Councilmembers: Hasse, House, Keller, Barovsky and Van Horn

NOES: 0

ABSENT: 0

ABSTAIN: 0


VIRGINIA BLOOM, City Clerk

Interested parties may petition the court for judicial review of this decision. Pursuant to Code of Civic Procedure Section 1094.6 and Malibu Municipal Code Section 1500, any such petition must be filed no later than the 90th day from the 8th day of November, 1999, the date in which this decision became final.

The first part of the document is a letter from the President of the United States to the Congress.

The second part of the document is a report from the Secretary of the Treasury.

The third part of the document is a report from the Secretary of the Interior.

The fourth part of the document is a report from the Secretary of the Navy.

The fifth part of the document is a report from the Secretary of the Army.

The sixth part of the document is a report from the Secretary of the State.

The seventh part of the document is a report from the Secretary of the War.

The eighth part of the document is a report from the Secretary of the Marine Corps.

RESOLUTION NO. 99-24

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
MALIBU APPROVING A GENERAL PLAN AMENDMENT 99-
001(C) TO CLARIFY THE POLICY REGARDING FLOOR AREA
RATIO (FAR) IN COMMERCIAL LAND USE DESIGNATIONS,
APPROVING A NEGATIVE DECLARATION, AND INITIATING
A RELATED ZONE TEXT AMENDMENT

WHEREAS, the City of Malibu has adopted a General Plan, containing a mission statement, goals and policies, and land use development densities, including a maximum range Floor Area Ratio (FAR) for the Commercial General (CG) Land Use category from 0.20 to 0.25, and

WHEREAS, the City of Malibu Zoning Ordinance establishes standards for development, including a maximum Floor Area Ratio (FAR) for commercial zones of 0.15, such that the Zoning Ordinance FAR limit is less than the range allowed in the General Plan Commercial General (CG) land use category, and

WHEREAS, the Council wishes to clarify the policy regarding FAR in the CG land use category, and

WHEREAS, on April 26, 1999, the City Council conducted a public hearing following notification in the prescribed manner, and at which hearing the Council considered a staff report, public testimony and other related information.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF MALIBU DOES HEREBY RESOLVE:

Section 1. The City Council of the City of Malibu has considered the Initial Study and Environmental Questionnaire for the project, prepared in accordance with the California Environmental Quality Act (CEQA), has exercised its independent judgement in evaluating the information, has determined that no adverse environmental consequences will result from the proposed General Plan Amendment, and hereby adopts a Negative Declaration, in accordance with the provisions of CEQA.

Section 2. The City Council of the City of Malibu hereby adopts General Plan Amendment 99-001 (C), as contained on the attached Exhibit A.

Section 3. The City Council hereby initiates a Zone Text Amendment to modify the Zoning Ordinance development standards for non-residential properties to address the bonus

A resolution of the City Council of 1921, is
the basis of the present study. The study was
made by the City Engineer, and the results
are given in the following pages. The study
was made by the City Engineer, and the results
are given in the following pages.

The study was made by the City Engineer, and the results
are given in the following pages. The study was made
by the City Engineer, and the results are given in the
following pages.

The study was made by the City Engineer, and the results
are given in the following pages. The study was made
by the City Engineer, and the results are given in the
following pages.

The study was made by the City Engineer, and the results
are given in the following pages. The study was made
by the City Engineer, and the results are given in the
following pages.

The study was made by the City Engineer, and the results
are given in the following pages. The study was made
by the City Engineer, and the results are given in the
following pages.

The study was made by the City Engineer, and the results
are given in the following pages. The study was made
by the City Engineer, and the results are given in the
following pages.

The study was made by the City Engineer, and the results
are given in the following pages. The study was made
by the City Engineer, and the results are given in the
following pages.

The study was made by the City Engineer, and the results
are given in the following pages. The study was made
by the City Engineer, and the results are given in the
following pages.

The study was made by the City Engineer, and the results
are given in the following pages. The study was made
by the City Engineer, and the results are given in the
following pages.

development intensity as established by this General Plan Amendment.

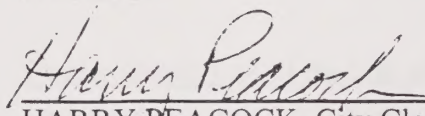
Section 4. The City Clerk shall certify the adoption of this Resolution.

PASSED, APPROVED AND ADOPTED this 26th day of April, 1999.



WALT KELLER, Mayor

ATTEST:



HARRY PEACOCK, City Clerk

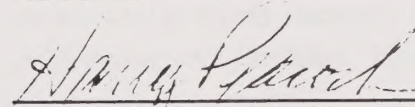
I CERTIFY THAT THE FOREGOING RESOLUTION NO. 99-24 was passed and adopted by the City Council of the City of Malibu at the regular meeting thereof held on the 26th day of April, 1999, by the following vote:

AYES: 5 Councilmembers: Hasse, Barovsky, House, Van Horn and Keller

NOES: 0

ABSENT: 0

ABSTAIN: 0



HARRY PEACOCK, City Clerk

Interested parties may petition the court for judicial review of this decision. Pursuant to Code of Civic Procedure Section 1094.6 and Malibu Municipal Code Section 1500, any such petition must be filed no later than the 90th day from the 26th day of April, 1999, the date in which this decision became final.

EXHIBIT A

GENERAL PLAN AMENDMENT 99-001C

Page 1-47, Paragraph Two

"Commercial development, either new uses or expansions of existing uses, ~~is are~~ permitted the ~~maximum~~ ~~minimum~~ development intensity of their site as ~~provided for in the Zoning Ordinance indicated on the General Plan Land Use Map~~ if the proposed development is consistent with the goals, objectives, policies and implementation measures of the General Plan. Development intensities greater than the ~~Zoning Ordinance maximum~~ ~~minimum~~ development intensity may be permitted up to the maximum development intensity ~~bonus of the General Plan~~ only if the proposed project provides public benefits or amenities as specified ~~below: in the Zoning Ordinance.~~"

Public benefits shall include physical improvements dedicated and reserved for public use, including, but not limited to open space, wetlands, trails and walkways, parks, athletic fields, and civic or public buildings (such as senior center, youth facilities, city hall, etc.) The public benefit or amenity shall warrant the burdens of the development intensity bonus over the Zoning Ordinance maximum, subject to review and approval by the City.

Page 1-48, Paragraph Three

COMMERCIAL GENERAL (CG): The CG designation provides for more intense commercial uses, visitor serving uses and light industrial uses located on larger sites. Floor-to-Area Ratio (FAR) shall range from a maximum of 0.15 ~~0.20~~ to 0.25. Uses that are permitted and conditionally permitted are defined in the Zoning Ordinance but would typically include the following: all permitted uses within the CN and CC designations and mixed commercial and residential projects, masonry supplies, plant nurseries, and restaurants, movie theaters and performing arts facilities. Housing affordable to low, very low and moderate income families shall also be permitted.

RESOLUTION NO. 99-06

A RESOLUTION OF THE CITY OF MALIBU APPROVING GENERAL PLAN AMENDMENT NO. 98-002 TO AMEND THE CITY'S GENERAL PLAN LAND USE MAP FROM MULTI-FAMILY (MF) TO SINGLE FAMILY-MEDIUM (SF-M) AND LOT LINE ADJUSTMENT NO. 98-006 CREATING A LARGER LOT AREA ON A PARCEL OF LAND LOCATED AT 3810 LAS FLORES CANYON ROAD.

The City Council of the City of Malibu does hereby Find, Order and Resolve as follows:

Section 1. Applications. On May 4, 1998, application for General Plan Amendment No. 98-002 and Lot Line Adjustment 98-006 were filed on behalf of the property owner, Mr. Howard M. Stover and Casa Malibu, L.L.C., the application also included a request for zoning map amendment at 3810 Las Flores Canyon Road.

Section 2. Planning Commission Public Hearing. On December 7, 1998, the Planning Commission held a duly noticed public hearing and considered all testimony, written and oral, relative to consideration of the proposed General Plan Amendment No. 98-002 and Lot Line Adjustment 98-006 and additional requests to amend the zoning map, and recommended approval of General Plan Amendment No. 98-002 and Lot Line Adjustment No. 98-006.

Section 3. City Council Public Hearing. On January 25, 1999, the City Council held a duly noticed public hearing and considered all testimony, written and oral, relative to consideration of proposed General Plan Amendment 98-002.

Section 4. Categorical Exemption. Pursuant to Section 15305 of the California Environmental Quality Act (CEQA), the Planning Director finds that this project will not have a significant effect on the environment and which shall, therefore, be exempt from the provisions of CEQA.

Section 5. Lot Line Adjustment Findings. Following consideration of the agenda report, Planning Commission Resolution and meeting minutes, and all testimony, written and oral, the City Council hereby determines that the following findings have been made:

- A. The lots proposed to be created by the lot line adjustment comply with all applicable zoning regulations, including the lot size requirement; additionally, the lots created each comply with the lot dimension requirements of Article IX (Interim Zoning Ordinance).
- B. The lot line adjustment, in and of itself, will not result in the need for additional improvements and/or facilities.

- C. No additional parcels shall result from the lot line adjustment, and any land taken from one (1) parcel shall be added to an adjacent parcel.
- D. The proposed adjustment will result in a generally continuous and straight property line extending the full length of the property's lot line dimension.
- E. The adjacent property owner directly involved in the lot line adjustment has provided written authorization to the applicant supporting the proposed action.

Section 6. General Plan Amendment Finding. Following consideration of the agenda report, Planning Commission Resolution and meeting minutes, and all testimony, written and oral, the City Council hereby determines that the proposed general plan amendment will result in a reduction of the potential maximum density allowed and is therefore consistent with the vision of the general plan.

Section 7. General Plan Amendment and Lot Line Adjustment Approval. Based on the foregoing findings the City Council approves General Plan Amendment No. 98-002, amendment to the City's General Plan Land Use Map from Multi-Family (MF) to Single Family-Medium (SF-M) on a parcel of land located at 3810 Las Flores Canyon Road, and Lot Line Adjustment No. 98-006 to create a larger lot area at 3810 Las Flores Canyon Road.

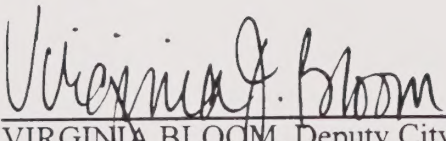
Section 8. The City Clerk shall certify the adoption of this Resolution.

PASSED, APPROVED AND ADOPTED this 25th day of January, 1999.



WALT KELLER, Mayor

ATTEST:



VIRGINIA BLOOM, Deputy City Clerk

1. The first part of the report is a general introduction to the subject of the study. It discusses the importance of the study and the objectives of the research.

2. The second part of the report is a detailed description of the methodology used in the study. It includes information about the sample size, the data collection methods, and the statistical analysis techniques.

3. The third part of the report is a presentation of the results of the study. It includes tables, figures, and text describing the findings of the research.

4. The fourth part of the report is a discussion of the results and their implications. It includes a comparison of the findings with previous research and a discussion of the limitations of the study.

5. The fifth part of the report is a conclusion and a list of references. The conclusion summarizes the main findings of the study and provides recommendations for future research. The references list the sources of information used in the study.

6. The sixth part of the report is an appendix containing additional information related to the study. This may include raw data, detailed calculations, or other supporting materials.

7. The seventh part of the report is a final summary of the study. It provides a brief overview of the entire report and highlights the key findings.

8. The eighth part of the report is a list of figures and tables. This section provides a detailed description of each figure and table and explains how they relate to the findings of the study.

9. The ninth part of the report is a list of abbreviations and acronyms. This section provides a clear definition for each abbreviation and acronym used in the report.

10. The tenth part of the report is a list of keywords. This section provides a list of terms and phrases that are used throughout the report to describe the study.

11. The eleventh part of the report is a list of acknowledgments. This section provides a place to thank individuals or organizations that have provided support or assistance during the study.

12. The twelfth part of the report is a list of appendices. This section provides a list of all the additional materials included in the report, such as raw data or detailed calculations.

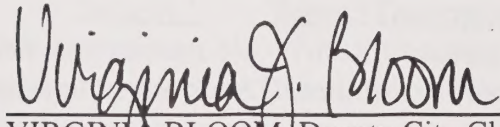
I CERTIFY THAT THE FOREGOING CITY COUNCIL RESOLUTION NO. 99-06 was passed and adopted by the City Council of the City of Malibu at the regular meeting thereof held on the 25th day of January, 1999, by the following vote:

AYES: 5 Councilmembers Barovsky, Hasse, House, Mayor Pro Tem Van Horn
and Mayor Keller

NOES: 0

ABSENT: 0

ABSTAIN: 0



VIRGINIA BLOOM, Deputy City Clerk

\\Reso.CC.draftGPALLA2

THE CITY OF LOS ANGELES
OFFICE OF THE CITY CLERK
100 N. WILSON AVENUE
LOS ANGELES, CALIF. 90012

I CERTIFY THAT THE FOREGOING CITY CLERK'S REPORT WAS PREPARED BY THE CITY CLERK OF THE CITY OF LOS ANGELES AND IS TRUE AND CORRECT TO THE BEST OF HIS KNOWLEDGE AND BELIEF.

CITY CLERK

NOTED

RECEIVED

DATE

W. J. Wilson

CITY CLERK

WITNESSED

RESOLUTION NO. 97-042

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MALIBU ADOPTING NEGATIVE DECLARATION NO. 97-018 AND APPROVING GENERAL PLAN AMENDMENT NO. 97-001 ADOPTING THE FOLLOWING AMENDMENTS TO THE GENERAL PLAN HOUSING ELEMENT: ADDING SECTIONS 7.2.3.8 AND 7.3.4.7; AMENDING IMPLEMENTATION MEASURES 9, 10, 13, 14, AND 19; RENUMBERING IMPLEMENTATION MEASURES 11 THROUGH 34; AND AMENDING APPENDIX C.

The City Council of the City of Malibu does hereby Find, Order, and Resolve as follows:

Section 1. Project Description. On June 23, 1997, the City Council initiated General Plan Amendment No. 97-001 proposing to amend the Housing Element to respond to comments received by the State Department of Housing and Community Development dated May 29, 1997.

Section 2. State Department of Housing and Community Development Review. The City prepared draft revisions to its Housing Element in response to the State Department of Housing and Community Development's (HCD) May 29, 1997, comments and submitted them to HCD for review on June 20, 1997, pursuant to Government Code Section 65585(b). On July 29, 1997, HCD submitted a letter to the City stating that it would not provide comments regarding the proposed amendments to the City's Housing Element.

Section 3. Public Hearing. On July 14, 1997, the City Council conducted a duly noticed public hearing regarding the subject Negative Declaration and General Plan Amendment and continued the hearing to August 25, 1997.

Section 4. Negative Declaration Findings. Pursuant to the authority and criteria contained in the California Environmental Quality Act (CEQA), the City Council finds as follows:

a. Negative Declaration No. 97-018 was prepared in conformance with the provisions of the CEQA and the Negative Declaration and Initial Study reflect the independent judgment of the City.

b. Negative Declaration No. 97-018 was noticed and circulated in accordance with CEQA and the public comment period for this Negative Declaration expired on July 14, 1997.

c. No written comments have been received by the City with regard to this negative declaration.

d. Based on the Initial Study there is no substantial evidence that the proposed

amendments will have a significant environmental effect and no new environmental information has been brought forward during public hearings.

Section 5. Negative Declaration Approval. The City Council hereby approves and adopts Negative Declaration No. 97-018 attached hereto as Exhibit A, finding that the proposed amendments to the General Plan Housing Element will not have a significant adverse impact on the environment.

Section 6. General Plan Amendment Findings. Having heard all oral and written testimony and considered all relevant evidence and argument presented at the July 14, 1997, public hearings, the City Council in accordance with Section 9552 of the Malibu Municipal Code finds as follows:

- a. Pursuant to Municipal Code Section 21107, the Planning Commission has no jurisdiction over General Plan Amendments. The public hearing was properly noticed in accordance with Article IX of the Municipal Code.
- b. The amendments are internally consistent and compatible with all elements of the General Plan.
- c. All of the policies and constraints identified in the elements of the General Plan are reflected in the restrictions and policies set forth in the Land Use Element. The restrictions and policies of the Land Use Element are the basis of the site inventory and programs of the Housing Element, as well.
- d. It appears that the City is not required at this time to prepare the Housing Element because the Southern California Association of Governments (SCAG) has not yet prepared any Regional Housing Needs Assessment (RHNA) for the City; and, therefore, the City does not have SCAG's projection on which to base its Housing Element objectives. Cities that already had RHNA numbers have been given an extension to update their Housing Elements and are permitted to continue to use the RHNA numbers that technically expired in 1994. These numbers were prepared before Malibu incorporated and so none were prepared for Malibu. Some cities have taken the position that the update of their Housing Element is an "unfunded mandate" and thus they are not required to complete their updates. The City is equally handicapped by the absence of RHNA numbers. To avoid future conflict, the City has prepared the Housing Element, utilizing the analysis and formulae that SCAG will use once it is funded. The City Attorney advised that the lack of funding may provide a legal excuse for not prepared a housing element at all; however, without waiving its right, the City has determined that it is in the best interests of the City to amend the Housing Element in response to HCD's comments dated May 29, 1997.
- e. The City has revised the Housing Element to respond to HCD's comments,

with a few exception noted below. The City Council found that no revisions were indicated for certain comments and that even without revision, the element complied with the requirements of law. In specific response to HCD's comments, the City finds as follows:

1. In response to comments by HCD dated May 30, 1996, this Housing Element contains revisions to Implementation Measures 9, 10, 13, 14, and 19; Appendix C; and adds Section 7.3.4.7. The Housing Element as amended by this resolution continues to comply with the requirements of Article 10.6 of the State Planning and Zoning Law.

2. The City makes the following findings to explain the reasons that the element complies with Article 10.6 of the Planning and Zoning Law, despite the HCD comments in response to which the City did not revise the Housing Element:

HCD Comment:

B. Programs

1. Identify adequate sites which will be made available through appropriate zoning and development standards needed to facilitate and encourage the development of a variety of housing types for all income groups, including multifamily rental housing, factory-built housing, mobilehomes, and emergency shelters and transitional housing. Where the inventory of sites does not identify adequate sites to accommodate the need for all household income groups pursuant to Section 65584, the program shall provide for sufficient sites with zoning that permits owner-occupied and rental multifamily residential use by right, including density and development standards that could accommodate and facilitate the feasibility of housing for very low-and low-income households (Section 65593(c)(1)).

a. The revised element still does not identify adequate sites with appropriate zoning and development standards needed to accommodate the City's lower-and moderate-income housing needs. The element still provides no credible evidence to support the City's assumption that its General Commercial zone, which limits residential development to a maximum of four units per acre with the award of a .05 density bonus, will facilitate the development of housing for lower- and moderate-income households.

City Finding:

HCD continues to stubbornly advocate for high density residential zoning by rejecting the City's program out-of-hand. HCD was provided the evidence and analysis by which the City concluded the mixed-use zones would be effective and simply appears to draw a different conclusion than the

City has drawn from the same evidence. As stated in a letter to Kimberley Dellinger of HCD dated May 6, 1997, the current program allows for mixed use projects in the General Commercial zones. These projects must meet the floor area ratio for Commercial General zones and are allowed up to 4 units per acre. This program has been modified to clarify that the affordable housing incentives of a 25 percent density bonus for the residential portion of a project is in addition to a .05 floor area ratio (FAR) bonus for the commercial portion of the project.

For example, the FAR for the General Commercial land use designation is .25 which results in 10,890 square feet of floor area for a one acre parcel. With the FAR bonus of .05, the new FAR of .30 would allow for 13,068 square feet of floor area, or an increase of 2,178 square feet on the same one acre parcel. City staff has had discussions with landowners in the Civic Center area which the City has identified as the most likely location for mixed use projects. These discussions reveal that retail space rents range from \$0.50 to \$5.50 per month for buildings constructed within the past ten years, with the average rent being \$3.00 per month. Therefore, if a landowner in the CG land use designation requests to build 4 units of very low income housing on one acre, then the landowner would be allowed one additional unit and with the FAR incentive would have the ability to earn an additional \$6,534 per month, or \$78,408 per year, of retail space rent for each acre of land. The City finds that this direct financial incentive, along with a reduction in certain development standards, would be a substantial incentive to encourage mixed use development.

HCD Comment:

As noted in our May 30, 1996 review of the City's adopted element and findings, the very low density and stringent affordability requirements of this zone contrast markedly with successful mixed-use programs implemented in other communities with high land and construction costs. For your information, the examples provided of mixed use programs in other communities was not intended to compare the geologic/environmental conditions of these communities with those of Malibu. Rather, the examples were provided to help demonstrate that, given Malibu's high land and development costs, four units per acre is insufficient to facilitate and encourage the development of affordable housing as required by Government Code Section 65583(c)(1).

City Finding:

The City does understand that the purpose of this comparison was to indicate the relationship between high land/costs and the densities that some cities have used to achieve a successful mixed use housing program. However, the entire purpose of State housing law as it relates to housing elements is for the city to identify the constraints on housing and from those constraints adopt appropriate housing programs. Again, HCD does not acknowledge the multiple constraints of the City that are well documented in Section 7.3.1 (Environmental Constraints) of the Housing Element and the General Plan's Opportunities and Constraints reports which were submitted to HCD along

about safety hazards. Even with this hypothetical density of 20 units per acre, very often large portions of land were required by the County to be deed-restricted as unbuildable because of severe geologic hazards. One example (of many such cases) is the Lunita Pacific tract map to divide 6.5 acres into 38 townhomes (around 8-9 units per acre) which the County required the subdivider to deed-restrict portions of the property due to seismic hazards.

HCD Comment:

With appropriate zoning and development standards, the City could accommodate its entire regional need for lower- and moderate-income households on less than three acres of land. During our visit to Malibu in 1996, City staff highlighted numerous sites, with commercial and residential zoning, that could safely accommodate large numbers of multifamily housing. Indeed, many of the larger single-family homes in Malibu contain more square footage and developed lot area than would be required to accommodate small multifamily developments (e.g., project of 6-12 units).

City Finding:

City staff does not recall any visits to Malibu by HCD staff in 1996, after the adoption of the General Plan in November 1995, as indicated in HCD's comment. City staff does recall a visit by HCD staff prior to the adoption of the General Plan. During this visit, City staff did identify various sites in the City that could accommodate affordable housing. Those sites are included in the Housing Element in Section 7.3.2 (Assessment of Land Suitable for Residential Development) and are graphically depicted as Figure H-2. However, none of these alternative sites are free of geological hazards and the City determined that the Civic Center area was the most appropriate location given the geologic constraints, infrastructure constraints, and use compatibility issues. State law gives the City the right to determine the appropriate location of various uses of land. Additionally, HCD has provided no evidence to support this assertion that there are many homes in the City larger than small multifamily developments at up to 12 units.

HCD Comment:

For these reasons, it is difficult to accept the City's contention that it cannot find a few acres, out of the 5,800 currently available, that could be safely developed with multifamily housing at a density necessary to facilitate and encourage affordable housing.

City Finding:

It is important to note that the City is not required to identify and designate every available site in the City which might be developed or re-developed for affordable housing. Instead, the point of the analysis is to identify sites adequate to meet the City's housing goals, including its RHNA goals.

The City has done that.

The City has found 34 acres, far more than the 3 acres suggested by HCD, where affordable housing could be safely constructed. HCD again believes that the only method to achieve affordable housing is through high density (over 30 units per acre) instead of through lower density, mixed use projects. As the City has stated previously, most of these vacant 5,800 acres are located in areas with steep topography, severe landslide hazards, and poor vehicular access. The City has previously provided HCD with copies of the General Plan Background and Constraints Reports as further proof of these constraints.

HCD Comment:

The City argues that its zoning ordinance allows for a variety of housing types and that multifamily projects have been approved by the City Council. As an example of this, the City cites the recent approval of a 22-unit condominium project which complies with the 6 unit per acre density standard and the 4 space per unit parking requirement. The City's argument and example, however, ignore the fundamental purpose of this requirement --- "*a variety of types of housing for all income levels*". The actual housing cost or relative affordability of this project is conspicuously absent.

City Finding:

The reason that the City provided this example is in direct response to a statement made by Mr. Collard of HCD staff on the telephone to City staff. Mr. Collard stated that in addition to being required to show that affordable housing could be constructed the City also must show that a variety of housing types could be constructed, regardless of affordability. Mr. Collard's comment was related solely to the City allowing for a variety of housing and that HCD was concerned that all types of housing from large single-family, small single-family, and multiple family projects could be constructed under the Interim Zoning Ordinance (IZO) development standards. It is confusing that after the City has proven that it is not only feasible within the standards of the IZO to build a variety of housing types and that projects have been approved, that HCD appears to have changed the meaning of this comment and rejects the evidence that the City has submitted. As HCD has been informed, the IZO is in the process of undergoing a comprehensive update which should be completed by December 1997.

HCD Comment:

Following an analysis of land use policy 2.1.7 as required in item A, above, the element may need to include a program to remove or mitigate this potential constraint.

with the revisions to the Housing Element adopted by the City Council on January 27, 1997.

HCD Comment:

The City now argues that the potential flooding and seismic liquefaction risks of the general commercial zone makes this area less suitable for residential uses. However, this is the area the City chose to zone for mixed-use development and accommodate its affordable housing needs. It is not clear how the City determined that mixed-use developments with a residential component of four units per acre can be safely accommodated in this area but developments with higher residential densities, necessary to accommodate affordable housing, would be unsafe. If these sites are not appropriate, the City should identify other sites which can accommodate needed development.

City Finding:

The City determined the appropriate densities given the environmental constraints of the area. HCD again questions the physical hazards which would limit these densities and that these lower densities could provide up to 136 units. The density of four dwelling units per acre is based upon a careful balance between providing enough units per acre to allow for affordable housing and the recognition of the City's unique geological constraints. The goal is the number of units that could be provided, not density. The reconciling of competing interests is necessarily a legislative act and thus the Council is not obligated to adopt HCD's one-sided solution.

Under the Seismic Hazard Mapping (SHM) Act, on April 8, 1997, the California Department of Conservation, Division of Mines and Geology (CDMG) released the first of its series of about 39 Seismic Hazard Zone maps covering the Los Angeles Basin and the portion of Malibu that had been studied has been designated as a Seismic Hazard Zone (SHZ). Of the area surveyed by the State (18808 to 20700 Pacific Coast Highway and all of the Big Rock Mesa area except the western most portion of Seaboard Drive), 90% of the land area in the City on the Topanga Seismic Hazard Zone Map is designated a Seismic Hazard Area. This includes liquefaction and earthquake-induced landslides but areas designated for the other hazards (such as ground shaking and ground failure) are not yet published.

Under the State's current schedule, it is anticipated that the remaining portions of the City will be evaluated by mid to late 1998. With the exception of the Point Dume area, the City Geologist indicates that the vast majority of the City will be designated an SHZ. This designation requires disclosures and seismic investigations prior to any development and the State statute is apparently designed to decrease development in these hazard zones. Thus, the City's mixed use and lower density approach to developing affordable housing may ultimately be compelled by the SHM Act.

The City further notes that, in the City's unfortunately considerable experience, emergency response

and evacuation considerations also weigh against high density development in this area.

HCD Comment:

The City further argues that its limited supply of land, suited to, and zoned for commercial development requires that the general commercial zone be largely reserved for commercial uses, including visitor-serving uses as mandated by the State Coastal Act. Again, however, the City chose to accommodate its affordable housing needs in this area. Many coastal jurisdictions in California have been able to effectively integrate both State housing and coastal requirements.

City Finding:

Both high-density multiple family and visitor-serving commercial uses require similar type of land suitable for development. These areas must be relatively flat, with easy access to major roadways, and must not create adverse impacts on single-family residential properties. Therefore, balancing these requirements is a difficult task. The Civic Center area is one of the few locations in the City where there is suitable land for both types of development. Therefore, the City is attempting to meet the goals of both State housing law and State Coastal Commission policy.

HCD Comment:

As previously noted, the City has an abundance of vacant land (some 5,800 acres) zoned for very low-density residential development, some of which could safely accommodate higher residential densities. Prior to the comprehensive downzoning of all residential properties initiated by the City in 1991, multifamily densities of up to 20 units per acre were regularly permitted uses in Malibu. It was only following the City's recent incorporation that multifamily densities were reduced to an unprecedented maximum of 6 units per acre.

City Finding:

HCD seems to be again advocating its preference for high density development rather than evaluating the new programs that the City has developed. As previously reported to HCD on multiple occasions, the City designated land for single-family residential development because the sensitive geology, sensitive environmental habitats, and poor infrastructure led the City to designate this vacant land for low-density residential and that this property could not safely, or was not otherwise well-suited to, accommodate higher residential densities. Furthermore, HCD's assertion that prior to cityhood "multifamily densities of up to 20 units per acre were regularly permitted uses in Malibu" is incorrect. The Malibu/Santa Monica Mountains Land Use Plan, which acted as the General Plan for this area prior to incorporation, designated relatively few sites at a density of 20 units per acre. Additionally, these previous designations did not reflect site-specific information

City Finding:

As noted in the analysis of Land Use Policy 2.1.7 in Section 6 of this resolution below, this policy does not create a potential constraint, therefore, no new programs are required.

HCD Comment:

In addition, the revised element still does not respond to the comments raised in our October 19, 1995, and May 30, 1996 reviews regarding program implementation.

City Finding:

Program implementation deficiencies were not listed in HCD's May 30, 1996, review letter, therefore, the City assumed that these concerns had been adequately addressed by the City previously. Now HCD has resurrected prior comments. Staff contacted HCD for specifics of this comment and they referred staff to the following comments in HCD's October 19, 1995, review letter.

HCD Comment:

3. The element should clarify how programs designed to meet the housing needs of low- and moderate-income households will be effectively implemented within the planning period (Section 65583(c)(2)).

a. The element should clarify the City's role in implementing many of the proposed programs. For example:

Measure 1: How will the City "work with" property owners and developers to encourage the development of affordable housing? Will the City provide incentives other than those described in Measure 18?

City Finding:

Implementation Measure 1 clearly indicates that the City will accomplish this goal through development agreements which can allow for additional reductions in development standards in addition to those specified in Appendix C of the Housing Element. However, these incentives would be specific to the project, which is the purpose of a development agreement. Therefore, it would not be appropriate to limit the types of incentives in this implementation measure and it should not be amended.

HCD Comment:

Measure 5: What actions will the City need to undertake to allow residential care facilities or other kinds of group housing in commercial zones?

City Finding:

It is unclear as to why HCD has resurrected this issue because the IZO has been amended to conditionally permit residential care facilities for the elderly in all Community Commercial, Commercial Visitor Serving, and Commercial General zoning districts. Therefore, this implementation measure has already been accomplished and no amendments are necessary because this comment is no longer valid.

HCD Comment:

Measure 15: What actions will be required to allow residential uses in commercial buildings? How will density increases be possible within existing structures? Will the City also allow defunct commercial buildings to be replaced with residential developments?

City Finding:

Since HCD resurrected these comments and provided no new analysis, staff assumes that they are referring to Implementation Measure 16 which states the following "Encourage the adaptive reuse of commercial buildings to residential use by allowing increased density where new housing units are created in existing structures and in proportion to the number of new units which are deed restricted for very low, low or moderate income families and, where necessary, by decreasing the minimum number of parking spaces required for each unit restricted for seniors."

Again this would be implemented in the comprehensive zoning ordinance update. It is the purpose of the Housing Element to remove barriers to housing opportunities and that is what this implementation measure accomplishes through an update to the zoning ordinance.

HCD Comment:

Measure 22: How will the City participate in the County's mortgage credit certificate program?

City Finding:

Again, since HCD resurrected these comments and provided no new analysis, staff assumes that they are referring to Implementation Measure 23 which states the following: "Participate in Los Angeles County Community Development Commission housing programs such as the Mortgage Credit certificate Program for first-time home buyers." The City currently has few residents that are eligible for this program and has not yet entered into a participation agreement. However, the City will monitor these conditions and participate in the program at the appropriate time.

HCD Comment:

Measure 29: How will the City encourage participation in these programs? Does the City currently implement a CDBG funded housing rehab program? Does the City intend to apply for HOME funds?

City Finding:

Again, since HCD resurrected these comments and provided no new analysis, staff assumes that they are referring to Implementation Measure 30 which states the following: "Implement and encourage participation in the CDBG housing rehabilitation programs including the California HOME Program." However, since the Building Official has determined that the overwhelming condition of the City's existing housing stock is in very good to excellent condition and that only 47 units have been identified as in need of repair or rehabilitation and that few residents qualify for this program due to income restrictions. There is not a need at this time to participate in this program and the City will monitor these conditions to determine the appropriate time to participate.

Section 7. General Plan Amendment Approval. On the basis of the foregoing findings, the City Council hereby approves General Plan Amendment No. 97-001 amending the General Plan Housing Element as follows:

- a. Section 7.2.3.8 is hereby added to read as follows:

Pepperdine Students

Pepperdine University is a private university located outside of the City's jurisdiction in adjacent, unincorporated Los Angeles County. The University's total enrollment is 3,700 students and according to Pepperdine's Residential Life Office, 2,220 students (or 60% of the entire student population) are housed on campus. The University also requires all first year students to live on campus and the Residential Life Office has indicated that the University currently has no difficulties

in meeting this requirement.

Conclusion: Pepperdine University currently has enough housing for 60% of its student population to live on campus and for all first year students to live on campus. There is no evidence that the 40% of Pepperdine students who reside off-campus have special housing needs distinguishable from the needs of low-income households generally. Therefore, no housing program specific to Pepperdine students is necessary for the City.

b. Section 7.3.4.7 is hereby added to read as follows:

7.3.4.7 Land Use Policy 2.1.7

Land Use Policy 2.1.7 was developed to serve as a "back-up system" in the unlikely event growth projections prove inaccurate and an unexpected and unacceptable strain on the City's infrastructure develops. To assure that such a measure was not triggered erroneously, the trigger mechanism excludes the following three types of permits from the historic growth rate calculation: 1) permits for structures rebuilt due to disaster, 2) any period in which the City's development moratorium was in effect (March 1991 - March 1993), and County-issued permits during the incorporation process (December 1987 - March 1991).

This land use policy does not impose any limits on building. This policy merely acts as a reminder for the City to monitor the amount and type of development occurring in the City. If upon review of this information, the City determines that development is occurring out of balance with historic growth patterns, then the City would consider methods to bring future development back into balance. Additionally, this policy acts in conjunction with State law which requires cities to review their General Plans and the progress towards their implementation on an annual basis. Moreover, any implementation of the policy would necessarily involve an analysis pursuant to Housing Implementation Measure 2, which requires evaluation of impact on housing development as well as a general rule that all such enactments be consistent with the General Plan, including the Housing Element.

Conclusion: Land Use Policy 2.1.7 is a policy and not an implementation measure; therefore, no regulations are promulgated by this policy. This policy serves to ensure that when the City determines the adequacy of the various programs that it also take into consideration the type of development that has occurred. It is not a constraint on new housing.

c. Implementation Measure 9 is hereby amended in its entirety to read as follows:

H Implementation Measure 9: Make emergency shelters and transitional housing serving 25 persons or fewer a permitted or conditionally permitted use in all commercial areas of the Civic Center

Specific Plan where such projects do not create traffic, noise, or parking impacts greater than other permitted uses in the same zoning district.

Responsible Department:	City Council
Funding source:	General Fund
Time frame:	December 1997
Objective:	Not applicable

d. Implementation Measure 10 is hereby renumbered to Implementation Measure 11 and the following is hereby inserted in its place:

H Implementation Measure 10: Develop an incentive program to allow for relief from development standards and direct financial aid for developers willing to provide emergency shelters and transitional housing. The incentives may include, but are not limited to, any combination of the following: (a) 20% reduction in the setback requirements in addition to the minor modification setback reduction, if applicable, and a 20% reduction in the open space requirements; (b) financial incentives which may include direct financial aid including Community Development Block Grant funding, subsidization of infrastructure, or contribution from the City's affordable housing trust fund; (c) expedited permit processing; and (d) waiving of fees where appropriate.

Responsible Department:	City Council
Funding source:	General Fund
Time frame:	December 1997
Objective:	Not applicable

e. Implementation Measure 13 is hereby renumbered to Implementation Measure 16 and the following is hereby inserted in its place:

H Implementation Measure 13: Provide for development standards specific to multiple family and mobilehome park development, which standards will facilitate and encourage the attainment of the City's housing goals.

Responsible Department:	Planning Department
Funding source:	General Fund
Timeframe:	December 1997
Objective:	Not applicable

f. Implementation Measure 14 is hereby renumbered to Implementation Measure 17 and the following is hereby inserted in its place:

H Implementation Measure 14: Provide for development standards to facilitate and encourage entry-level single-family housing in the Single-Family Residential land use designations, consistent with the City's housing goals.

Responsible Department:	Planning Department
Funding source:	General Fund
Time frame:	December 1997
Objective:	Not applicable

g. Implementation Measure 19 is hereby renumbered to Implementation Measure 22 and is hereby amended in its entirety to read as follows:

H Implementation Measure 22: Develop an incentive program to allow relief from development standards and financial incentives for developers willing to provide affordable housing to low- and very low-income families. The incentives may include, but are not limited to, any combination of the following: (a) 20% reduction in the setback requirements in addition to the minor modification setback reduction, if applicable, and a 20% reduction in the number vehicle parking spaces required for housing units; (b) financial incentives which may include direct financial aid, including Community Development Block Grant funding, subsidization of infrastructure, or contribution from the City's affordable housing trust fund; and (c) expedited permit processing as described in Implementation Measure 17. A minimum of 30 years affordability shall be required to receive these incentives. Any developer who receives approval to use these incentives shall be required to screen initial tenants or buyers for compliance with income group limits and to establish a monitoring system to ensure continued affordability of units.

Responsible Department:	Planning Department
Funding source:	General fund, CDBG, development fees
Time frame:	December 1997
Objective:	Not applicable

h. The following Implementation Measures are hereby renumbered as follows:

<u>Old Number</u>	<u>New Number</u>
11	12
12	15
15	18
16	19
17	20

18	21
20	23
21	24
22	25
23	26
24	27
25	28
26	29
27	30
28	31
29	32
30	33
31	34
32	35
33	36
34	37

- i. Appendix C is hereby amended in its entirety to read as follows:

Appendix C

Scenario A: Multi-family project in Multi-Family (MF) or Multi-Family Beach Front (MFBF) land use designation. Any combination of the following incentives shall be available.

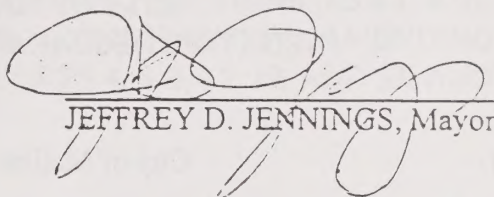
1. A density increase of 25% over the base density shall be allowed when the project provides one of the following: (a) 20% of the total units deed restricted for low income families, or (b) 10% of the total units deed restricted for very low income families, or (c) 50% of the total units deed restricted for seniors. (H Implementation Measure 4)
2. Any of the following development standard reductions: (a) 20% reduction in the setback requirements in addition to the minor modification setback reduction, if applicable; or (b) 20% reduction in the number vehicle parking spaces required for housing units. (H Implementation Measure 19)
3. Financial incentives may include direct financial aid including Community Development Block Grant funding, subsidization of infrastructure, or contribution from the City's affordable housing trust fund. (H Implementation Measure 19)
4. Expedite processing of planning approvals and building permits. (H Implementation Measure 17)

Scenario B: Mixed-use project in a Commercial General Zone. Any combination of the following incentives shall be available.

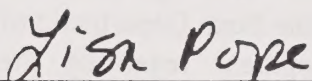
1. A density increase of 25% over the base density for the residential portion of a project shall be allowed when the project provides one of the following: (a) 20% of the total units deed restricted for low income families, or (b) 10% of the total units deed restricted for very low income families, or (c) 50% of the total units deed restricted for seniors. (H Implementation Measure 4)
2. Up to .05 increase over the maximum intensity permitted within Commercial General zones for that portion of the project dedicated to commercial uses. (H Implementation Measure 6)
3. Any of the following development standard reductions: (a) 20% reduction in the setback requirements in addition to the minor modification setback reduction, if applicable; or (b) 20% reduction in the number vehicle parking spaces required for housing units. (H Implementation Measure 19)
4. Financial incentives may include direct financial aid including Community Development Block Grant funding, subsidization of infrastructure, or contribution from the City's affordable housing trust fund. (H Implementation Measure 19)
5. Expedite processing of planning approvals and building permits. (H Implementation Measure 17)

Section 8. Certification of Adoption. The City Clerk shall certify the adoption of this Resolution and to file a Notice of Determination with the Los Angeles County Clerk together with any appropriate fee or Certificate of fee exemption authorized by Fish and Game Code Section 711.2.

PASSED, APPROVED AND ADOPTED this 25th day of August, 1997

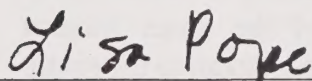

JEFFREY D. JENNINGS, Mayor

ATTEST:


LISA POPE, Deputy City Clerk
(seal)

I CERTIFY THAT THE FOREGOING RESOLUTION NO. 97-042 was passed and adopted by the City Council of the City of Malibu at the regular meeting held on the 25th day of August, 1997, by the following vote:

AYES:	5	COUNCILMEMBERS:	Jennings, House, Harlow, Keller, Van Horn
NOES:	0		
ABSENT:	0		
ABSTAIN:	0		


LISA POPE, Deputy City Clerk
(seal)

Interested parties may petition the court for judicial review of this decision. Pursuant to Code of Civic Procedure Section 1094.6 and Malibu Municipal Code Section 1500, any such petition of the decision approving the general plan amendment must be filed no later than the 90th day from August 25, 1997, the date in which this decision became final. Appeals of the negative declaration approval must be filed pursuant to the terms of the California Environmental Quality Act, Public Resources Code Section 21000 et seq.

EXHIBIT A

CITY OF MALIBU NEGATIVE DECLARATION NO. 97-018

PROPONENT:	City of Malibu
PROJECT DESCRIPTION:	A proposal to amend the General Plan Housing Element to address some of the concerns from the State Department of Housing and Community Development regarding the adequacy of the City's Housing Element. The changes to the Housing Element involve providing a description of Pepperdine Students for Special Housing Needs in Section 7.2.3; providing an analysis of Land Use Policy 2.1.7 in the Inventory of Governmental Constraints in Section 7.3.4; amending Implementation Measure 9 regarding emergency shelters and transitional housing; adding implementation measures regarding multiple family, entry-level single-family, and mobilehome park development standards; amending Implementation Measure 22 and Appendix C to clarify the City's affordable housing incentives; and renumbering Implementation Measures 11 through 34.
ENVIRONMENTAL SETTING:	The project area encompasses the entire City of Malibu which is located on the coastal slopes of the Santa Monica Mountains and is bounded by the Pacific Ocean to the south. The topography consists of steep hillsides, coastal terraces, canyons, bluffs, and sandy beaches. Elevations within the City range from sea level to approximately 1,700 feet above sea level.
ENVIRONMENTAL DETERMINATION:	None of these changes result in a change to any goals, policies, or objectives and these changes are internally consistent and compatible with all elements of the General Plan. Therefore, there will be no significant environmental impacts.
PROJECT LOCATION:	Citywide

RESOLUTION NO. 97-001

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MALIBU APPROVING NEGATIVE DECLARATION NO. 96-031 AND GENERAL PLAN AMENDMENT NO. 96-005 ADOPTING THE FOLLOWING AMENDMENTS TO THE GENERAL PLAN HOUSING ELEMENT: AMENDING SECTIONS 7.3.4.1 AND 7.3.4.2 (GOVERNMENTAL CONSTRAINTS); AMENDING IMPLEMENTATION MEASURES 4, 6, 9, 17, 19, AND 33; AND ADDING APPENDIX C.

The City Council of the City of Malibu does hereby Find, Order, and Resolve as follows:

Section 1. Project Description. On November 25, 1996, General Plan Amendment No. 96-005 was initiated by the City Council to amend the General Plan Housing Element.

Section 2. Public Hearing. A public hearing was noticed on January 13, 1997, and was continued to the January 27, 1997, City Council Meeting. On January 27, 1997, the City Council conducted a duly noticed public hearing regarding the subject Negative Declaration and General Plan Amendment.

Section 3. Negative Declaration Findings. Pursuant to the authority and criteria contained in the California Environmental Quality Act (CEQA), the City Council finds as follows:

a. Negative Declaration No. 96-031 was prepared in conformance with the provisions of the CEQA and the Negative Declaration and Initial Study reflect the independent judgment of the City.

b. Negative Declaration No. 96-031 was noticed and circulated in accordance with CEQA and the public comment period for this Negative Declaration expired on January 13, 1997.

c. No written comments have been received by the City with regard to this negative declaration.

d. Based on the Initial Study there is no substantial evidence that the proposed amendments will have a significant environmental effect and no new environmental information has been brought forward during public hearings.

Section 4. Negative Declaration Approval. The City Council hereby approves and adopts Negative Declaration No. 96-031 attached hereto as Exhibit A, finding that the proposed amendments to the General Plan Housing Element will not have a significant adverse impact on the environment.

Section 5. General Plan Amendment Findings. Having heard all oral and written testimony and considered all relevant evidence and argument presented at the January 27, 1997, public hearings, the City Council in accordance with Section 9552 of the Malibu Municipal Code finds as follows:

a. Pursuant to Municipal Code Section 21107, the Planning Commission has no jurisdiction over General Plan Amendments. The public hearing was properly noticed in accordance with Article IX of the Municipal Code.

b. The amendments are internally consistent and compatible with all elements of the General Plan.

c. All of the policies and constraints identified in the elements of the General Plan are reflected in the restrictions and policies set forth in the Land Use Element. The restrictions and policies of the Land Use Element are the basis of the site inventory and programs of the Housing Element, as well.

d. It appears that the City is not required at this time to prepare the Housing Element because the Southern California Association of Governments (SCAG) has not yet prepared any Regional Housing Needs Assessment (RHNA) for the City; and, therefore, the City does not have SCAG's projection on which to base its Housing Element objectives. Cities that already had RHNA numbers have been given an extension to update their Housing Elements and are permitted to continue to use the RHNA numbers that technically expired in 1994. These numbers were prepared before Malibu incorporated and so none were prepared for Malibu. Some cities have taken the position that the update of their Housing Element is an "unfunded mandate" and thus they are not required to complete their updates. The City is equally handicapped by the absence of RHNA numbers. To avoid future conflict, the City has prepared the Housing Element, utilizing the analysis and formulae that SCAG will use once it is funded. The City Attorney advised that the lack of funding may provide a legal excuse for not prepared a housing element at all; however, without waiving its right, the City has determined that it is in the best interests of the City to amend the Housing Element in response to HCD's comments dated May 30, 1996.

e. The City has revised the Housing Element to respond to HCD's comments, with a few exception noted below. The City Council found that no revisions were indicated for certain comments and that even without revision, the element complied with the requirements of law. In specific response to HCD's comments, the City finds as follows:

1. In response to comments by HCD dated May 30, 1996, this Housing Element contains revisions to Sections 7.3.4.1 and 7.3.4.2; Implementation Measures 4, 6, 17, and 19; and adds Appendix C. The Housing Element still complies with the requirements of Article 10.6 of the State Planning and Zoning Law.

2. The City makes the following findings to explain the reasons that the element complies with Article 10.6 of the Planning and Zoning Law, despite the few HCD comments in response to which the City did not revise the Housing Element:

HCD Comment: The City's claim that its mixed-use zoning, which limits residential development to a maximum of four units per acre with the .05 density bonus incentive, will "facilitate the feasibility of housing for lower- and moderate-income households" is entirely unsupported and contrasts markedly with mixed-use programs implemented in other communities with high land and construction costs.

City Finding: HCD's comment that the mixed use zoning would not provide for affordable housing reflect's its singular approach to this program. As stated in previous reports, there are many ways to provide for affordable housing in addition to a simple formula of residential density. The City's approach is to allow for a land owner to recoup the cost of providing for affordable housing by increasing the amount of commercial square footage and thereby generating revenue that the land owner would not otherwise have. Additionally, HCD cites the examples of the cities of Coronado, Sausalito, and Los Altos as cities with higher density mixed use zoning. However, these cities are not comparable to the City of Malibu because they are developed at greater intensities than Malibu is developed and they are relatively flat with few geological constraints. Malibu is a low-density, rural community with an extraordinarily high number of well-documented geological constraints and natural disasters and is not similar to these cities. Therefore, this is an inaccurate comparison. This is the City's first housing element and the City is already known to have been in the forefront of other successful experiments, such as its stormwater runoff ordinance which was a precursor to the Federal NPDES requirements. Therefore, the City would hope that HCD would understand that the City is committed to innovative approaches to land use issues and has a successful track record. The mixed use zoning, as proposed in the General Plan, is viable and the City is diligently moving forward to implement this program. In fact the Civic Center Specific Plan Advisory Committee along with the consultant, Mike Multari, are currently finalizing a workable program for the General Commercial zoning in the Civic Center area. Additionally, the City's consultant for the Zoning Ordinance update, Paul Crawford, has begun work on this issue for the remainder of the City and he expects to have this completed by June. Therefore, staff believes that this comment is misplaced and that the General Plan does not need to be changed to address this comment.

HCD Comment: The City's argument that few parcels of land in Malibu could attempt to accommodate higher densities (including sites designated for mixed-use development), "given the serious physical constrains and disaster prone nature of the area" is not only unsupported but inconsistent with information contained in the housing element. For example, the analysis of sites in the general commercial zone (page 54), indicates that all the parcels identified are relatively flat parcels without any major slopes that would inhibit

development.” While some of the sites are within a floodplain and therefore would have to comply with FEMA requirements, these structural requirements “are not believed at this time to be major impediments to construction.” The assumption that a given site can accommodate a commercial/residential mixed -use development (a highly intense land use), but is somehow not appropriate for multifamily housing is questionable.

City Response: HCD’s claim that the serious physical constraints and disaster prone nature of the area is “not only unsupported but inconsistent with information contained in the housing element” is incorrect. The record that there are serious physical constraints within the City is enormous. The geologic hazards from earthquakes, liquefaction, landslides, and coastal bluff erosion along with the natural disaster of fires and floods is unparalleled in the State of California for any comparably sized community. The constraints reports from the General Plan provide voluminous detail on the multiple hazards in the City. Additionally, Malibu has had 6 federally declared disasters and 1 federally declared emergency since incorporation in 1991. Accordingly, the General Plan constraints reports will be transmitted to HCD along with the recommended amendments in order to satisfy HCD regarding the documented physical constraints. Also, the City’s is long and narrow in shape, is bounded by the Pacific Ocean to the south and steep hillsides to the north, and many essential services are located outside of the City. These factors result in a circulation system that is severely constrained. This physical constraint results in a tremendous amount of traffic congestion which further limits the ability of the City to provide for high intensity land uses.

There are no inconsistencies within the General Plan regarding these physical constraints and the disaster prone nature of the area. HCD cites the fact that the General Plan indicates that all the parcels identified in the General Commercial zone are relatively flat without any major slopes that would inhibit development and concludes that if these properties are appropriate for commercial development then they are also appropriate for multi-family residential development. While it is true these properties have fewer constraints than the rest of the City, they still have severe flooding hazards and are subject to liquefaction. This makes them less suitable for residential uses. Thus, it is at best an exaggeration to suggest that the fact that the Civic Center is level means there is plenty of land to develop high density housing.

Most importantly, these properties amount to 100 acres of the City’s total 12,552 acres. This represents only .8 percent of the City’s total land. In fact, all of the City’s commercial designations (including less intense commercial) amount to 370 acres of the City’s 12,552 which represents only 3 percent of the City’s total land. Just as good planning dictates that a City needs to have a healthy mix of housing types, it must also have a healthy mix of retail and office uses to support the housing, among other reasons. General Commercial zoning districts are the most intense commercial sites in the City and are the areas that allow for shopping centers that cater to a wide variety of uses. The sites identified for General Commercial are the only sites in the City which are suitable for this type of development because they are adjacent or close to Pacific Coast Highway and partially developed

with intense commercial uses which also makes the areas less suitable for residential uses.

If the City were to redesignate this land to multiple-family residential, three results would occur. First, the residential properties in the City are mostly on steeply sloping lots which make intense development, such as commercial, completely infeasible. These residential areas are also served by inadequate road systems that could not handle commercial traffic thereby compounding the City's already overburdened circulation system. Additionally, these commercial uses are incompatible with the largely rural residential nature of these areas which is widely accepted as poor planning. Second, the City would not be able to provide a healthy mix of residential and commercial uses, because commercial development would be infeasible, thereby making it necessary for residents to shop in adjacent jurisdictions and thereby further compounding the traffic problem. Third, without feasible commercial development, the City would not be able to provide adequate visitor-serving uses as mandated by the California Coastal Act which the City is also compelled by State law to provide. HCD's comments make it impossible to comply with State of California laws, whether they are promulgated by HCD or the California Coastal Commission.

Section 6. General Plan Amendment Approval. On the basis of the foregoing findings, the City Council hereby approves General Plan Amendment No. 96-005 amending the General Plan Housing Element as follows:

- a. Section 7.3.4.1 is hereby amended in its entirety to read as follows:

7.3.4.1 Ordinances

The City Council issued a building moratorium for Malibu upon the City's incorporation. The moratorium expired on March 28, 1993. The City now has in place an Interim Zoning Ordinance (IZO) which provides reasonable standards for development. The IZO is intended to ensure that future development in the City is consistent with the City's objectives to preserve sensitive and unique environmental resources, retain the City's rural character, ensure that future development does not over-burden the City's limited infrastructure, and provide a balance of land uses. The overriding objective of the IZO and other ordinances adopted by the City is to protect the health, safety and welfare of the public. Further, and as previously noted, the City has adopted a mixed-use zone to permit the development of affordable housing.

The City Council has allowed for the creation of development standards which reflect the character of individual neighborhoods and has adopted individualized development standards for six neighborhoods in the City. Two of these overlay districts, La Costa and Malibu Country Estates, are in relatively intensely development neighborhoods and allow for homes to be built that exceed the structure size and setback limitations of the Interim Zoning Ordinance. Another overlay district, DeVille Way, allows for development standards for a multi-family project. The City Council has approved a tentative tract map for a 22 unit condominium project in the DeVille Way Overlay

District which meets the General Plan Multi-family density of 6 dwelling units per acre and also meets the Interim Zoning Ordinance's parking standards of 4 parking spaces per unit. In addition to the DeVille Way Overlay District, the Multi-family Beach Front zone allows for higher density multi-family projects with a reduction in half from 4 spaces to 2 spaces per dwelling unit.

The IZO's zoning designations are more restrictive in some cases than the land use categories presented in this General Plan and will be amended accordingly. The land use densities proposed in the Land Use Element (and as depicted on the Land Use Policy Map of the Land Use Element) have been developed based on specific constraints facing the City: (a) limited infrastructure; (b) sensitive and unique environmental resources; and (c) the area's geology and other physical constraints (including, but not limited to areas subject to flooding, landslides, liquefaction, brush fires, and other risks).

The City enforces the state's Building Standards Code. The use of uniform codes reduces housing costs and the corresponding City codes and ordinances do not constitute a constraint to the City's housing supply. The City's codes and ordinances are necessary for the City to ensure the protection of the City and to ensure the health, safety and welfare of the public and property. Table 7-14 provides a summary of the City's zoning regulations.

As part of the City's program to meet its affordable housing needs, the City will attempt to stimulate affordable housing production by modifying standards for new construction. The State density bonus statute addresses one area in which a development standard can be modified to reduce the cost of providing affordable housing. The City will create a discretionary modification permit that will allow developers of affordable housing to apply for modification of particular standards for particular projects. This way the City can remove any unnecessary barrier to development of a meritorious project, including parking requirements, lot coverage limits, site design standards and setbacks.

- b. Section 7.3.4.2 is hereby amended in its entirety to read as follows:

7.3.4.2 Permit Processing

One of the goals of the Planning Department is to process planning applications in a timely manner. Processing times within Malibu are similar to those of other cities that have similar sensitive environments. The Planning permit process in Malibu takes an average of three to four months, depending upon the complexity of the project and the individual site constraints.

Procedural handouts are available from the Planning Department and applicants are encouraged to meet with City staff prior to submittal to ensure that the application is complete. Staff is available for pre-application review of all proposed projects. Development is subject to standards in the Interim Zoning Ordinance, which is not unlike other cities. Because of Malibu's sensitive

environment, this review necessarily includes a heightened review of environmental issues. The General Plan is designed to increase the degree of certainty in the development review process without reducing the level of protection afforded to significant environmental features within Malibu.

The City's processing time for various permits is consistent with the State's Permit Streamlining Act (PSA). The time necessary to review and process permits, therefore, does not present a delay to development nor creates a government constraint. All applications, whether they are ministerial or discretionary, require the following reviews and approvals prior to planning approval. These reviews are conducted concurrently with the planning review which shortens the overall processing time for projects.

City Geologist and City Geotechnical Engineer: Due to complex geologic and geotechnical conditions in the City, development is subject to geologic and geotechnical reviews. Although the requirement for geological and geotechnical reports can extend the permit process, and thereby raise the cost of residential development, these reports are necessary to ensure public safety in Malibu. The average time to complete this type of review is two weeks from the time the materials are submitted to the time the City Geologist and City Geotechnical Engineer provide comments. The time the entire process takes from submittal of the application to the approval of the project by the City Geologist and City Geotechnical Engineer varies greatly depending upon the complexity of the project and the thoroughness and timeliness of the applicant's geologist's response. This processing time ranges from two weeks to two months.

City Environmental Health Specialist: The City Environmental Health Specialist reviews the adequacy of private sewage disposal systems. Review by the City Environmental Health Specialist is necessary because the City has no public sewer and approximately 84 percent of the dwelling units in the City have no access to a local/neighborhood sewer system. There are no plans to connect these dwelling units to a system. The average time to complete this type of review is two weeks from the time the materials are submitted to the time the City Environmental Health Specialist provides comments. The time the entire process takes from submittal of the application to the approval of the project by the City Environmental Health Specialist varies greatly depending upon the complexity of the project and the thoroughness and timeliness of the applicant's response. This processing time ranges from two weeks to two months.

City Archaeologist: The City Archaeologist reviews development applications if they are located in an archaeologically sensitive area. The City has adopted an archaeological review process that mirrors Appendix K of CEQA, which allows some projects to be exempt from review and other projects requiring either a Phase I Inventory or a Phase II Evaluation. Approximately 75 percent of planning projects require no archaeological review. Of the

remaining 25 percent, approximately 33 percent are granted waivers which typically take two to three weeks, approximately 51 percent require Phase I Inventories which typically take four to six weeks, and the remaining 15 percent require Phase II Evaluations which may take up to two months, depending upon the complexity of the project and the responsiveness of the applicant's archaeologist.

City Biologist/Environmental Review Board: Biological review is also required if a project is near an Environmentally Sensitive Resource Protection Area as identified in the Conservation Element and if the project has the potential to disturb these resources. The City Biologist reviews all new residential projects to determine whether or not they should be reviewed by the Environmental Review Board. The City Biologist's review typically takes three weeks. If the City Biologist determines that Environmental Review Board review is required, then the process typically extends another two months.

Additional reviews: Although not required for the majority of applications, City Engineer, Fire Department, Water Department, and Caltrans reviews are required on tentative maps so that appropriate conditions can be placed on projects. In some instances these reviews can be conducted over the counter, however, they typically take 30 days.

There are no other types of review that are required for residential development, except for compliance with Interim Zoning Ordinance standards or General Plan policies. The City does not require homeowners association review of development projects and the City does not have, nor does the General Plan contemplate, discretionary architectural review for residential development. All development applications which meet the requirements permitted by right of the zoning ordinance require only an administrative zone clearance or plot plan review. This can be granted by staff, without the need for a public hearing before the Planning Commission. These planning reviews are conducted concurrently with the approvals listed above. The following are the discretionary permits that may be required as part of a residential development:

Site Plan Review and Minor Modification Applications: Requests to allow for an increased structure height up to 28 feet for nonbeachfront homes require the approval of a site plan review and requests for decreased setbacks (up to 20 percent of the required setback) require the approval of a minor modification. Both of these are discretionary applications that can be granted by the Planning Director after appropriate notice to affected property owners. These applications typically take 10 to 12 weeks for approval from the time the application is submitted to the Planning Department until the application is decided by the Planning Director.

Conditional Use Permits, Variances, and Neighborhood Standards Applications: These applications are reviewed by the Planning Commission after a duly noticed public hearing and typically take 12 to 14 weeks from the time the application is submitted to the Planning Department until the application is decided by the Planning Commission.

Lot Line Adjustments, Tentative Parcel Maps, and Tentative Tract Maps: Lot line adjustments are approved by the Planning Director without the need of a public hearing and typically take four to six weeks to process. Tentative parcel and tract maps are ultimately reviewed by the Planning Commission after a duly noticed public hearing and typically take six months from the time the applications are accepted by the Planning Department as complete until they are decided by the Planning Commission.

Negative Declarations/Environmental Impact Reports: Typically the environmental review required by these project is a negative declaration and the timing for their approval is concurrent with the applications as described above. To date the City has not required an environmental impact report for any housing projects.

The City's procedures are typical of most cities. There is nothing unusual or onerous about the City's notice requirements and the process does not needlessly hinder development. Therefore, this process is not considered a constraint.

Currently, in addition to permit approval by the City, most projects also require coastal development permit from the California Coastal Commission. This dual permit requirement can add expense and delay. The City intends to seek certification of its local coastal program, which is being developed consistent with this Plan. Once certified, the City will issue coastal development permits as part of its planning review. This will significantly reduce the time and cost involved in obtaining necessary approvals to develop land in Malibu.

- c. H Implementation Measure 4 is hereby amended in its entirety to read as follows:

H Implementation Measure 4: Develop a density bonus system consistent with State law in which density on a project site designated for multi-family uses may be increased. A density increase of 25% over the base density shall be allowed when the project provides at least one of the following: (a) 20% of the total units deed restricted for low income families, or (b) 10% of the total units deed restricted for very low income families, or (c) 50% of the total units deed restricted for seniors. A minimum of 30 year affordability shall be required to receive this incentive. Any developer who receives approval to use this incentive shall be required to screen initial tenants or buyers for compliance with income group limits and establish a monitoring system to ensure the unit's continued affordability. The City shall encourage its use in areas where hazards such as flooding, fires, earthquakes and liquefaction do not pose unreasonable risks.

Responsible Department:	Planning Department
Funding source:	General fund/fees
Time frame:	June 1997
Objective:	3-4 units

- d. H Implementation Measure 6 is hereby amended in its entirety to read as follows:

H Implementation Measure 6: Permit structures and projects which include both commercial uses and affordable residential units in Commercial General (CG) zones. Projects which provide deed-restricted very low income, low income or senior housing will also be permitted a density bonus up to .05 over the maximum intensity permitted within Commercial General zones for that portion of the project dedicated to commercial uses. This incentive is in addition to the 25% density bonus for the residential portion of a project allowed under H Implementation Measure 4. The amount of bonus density for the commercial uses shall be directly related to the amount and type of affordable units provided. A minimum of 30 year affordability shall be required to receive these incentives. Any developer who received approval to use these incentives shall be required to screen initial tenants or buyers for compliance with income group limits and establish a monitoring system to ensure the unit's continued affordability.

Responsible Department:	City Council
Funding source:	General fund
Time frame:	June 1997
Potential no. of units:	136 units
Objective:	60 units

- e. H Implementation Measure 9 is hereby amended in its entirety to read as follows:

H Implementation Measure 9: Make emergency shelters and transitional housing, other than the smaller facilities already permitted in residential area, a permitted or conditionally permitted use in all commercial areas where such projects would be compatible with the surrounding uses.

Responsible Department:	City Council
Funding source:	General fund
Time frame:	June 1997
Objective:	Not applicable

- f. H Implementation Measure 17 is hereby amended in its entirety to read as follows:

H Implementation Measure 17: Establish a program to promote the expeditious processing of residential projects which qualify for a density bonus under the implementation measures of the housing element; Government Code Section 65915, as may be amended from time to time; or applicable state law.

Responsible Department:	City Council
Funding source:	General fund
Time frame:	June 1997
Objective:	Dependent on developer response

- g. H Implementation Measure 19 is hereby amended in its entirety to read as follows:

H Implementation Measure 19: Develop an incentive program to allow for relief from development standards and financial incentives for developers willing to provide affordable housing to low and very low income families. The incentives may include, but are not limited to, the following: (a) 20% reduction in the setback requirements in addition to the minor modification setback reduction, if applicable; or (b) 20% reduction in the number vehicle parking spaces required for housing units. Financial incentives may include direct financial aid including Community Development Block Grant funding, subsidization of infrastructure, or contribution from the City's affordable housing trust fund. A minimum of 30 year affordability shall be required to receive these incentives. Any developer who received approval to use these incentives shall be required to screen initial tenants or buyers for compliance with income group limits and establish a monitoring system to ensure the unit's continued affordability.

Responsible Department:	Planning Department
Funding source:	General fund, CDBG, development fees
Time frame:	June 1997
Objective:	Not applicable

- h. H Implementation Measure 33 is hereby amended in its entirety to read as follows:

H Implementation Measure 33: Enter into an agreement with Los Angeles County Housing Authority or other appropriate agencies such as the Westside Fair Housing Council to operate a Fair Housing Program encompassing investigation of discrimination complaints, research on housing discrimination related issues, and public information about the rights and responsibilities of land owners and tenants. Promote availability of the program through the use of pamphlets and public bulletin boards on community television.

Responsible Department: City Manager
Funding source: General fund/CDBG
Time frame: July 1997
Objective: Not applicable

- i. Appendix C is hereby added to read as follows:

APPENDIX C: INCENTIVES TO PROVIDE AFFORDABLE HOUSING

Scenario A: Multi-family project in a Multi-Family (MF) or Multi-Family Beach Front (MFBF) land use designation.

1. A density increase of 25% over the base density shall be allowed when the project provides one of the following: (a) 20% of the total units deed restricted for low income families, or (b) 10% of the total units deed restricted for very low income families, or (c) 50% of the total units deed restricted for seniors. (H Implementation Measure 4)
2. Any of the following development standard reductions: (a) 20% reduction in the setback requirements in addition to the minor modification setback reduction, if applicable; or (b) 20% reduction in the number vehicle parking spaces required for housing units. (H Implementation Measure 19)
3. Financial incentives may include direct financial aid including Community Development Block Grant funding, subsidization of infrastructure, or contribution from the City's affordable housing trust fund. (H Implementation Measure 19)
4. Expedite processing of planning approvals and building permits. (H Implementation Measure 17)

Scenario B: Mixed-Use Project in a Commercial General Zone

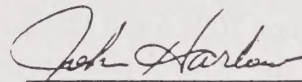
1. A density increase of 25% over the base density for the residential portion of a project shall be allowed when the project provides one of the following: (a) 20% of the total units deed restricted for low income families, or (b) 10% of the total units deed restricted for very low income families, or (c) 50% of the total units deed restricted for seniors. (H Implementation Measure 4)
2. Up to .05 increase over the maximum intensity permitted within Commercial General zones for that portion of the project dedicated to commercial uses. (H Implementation Measure 6)
3. Any of the following development standard reductions: (a) 20% reduction in the setback

requirements in addition to the minor modification setback reduction, if applicable; or (b) 20% reduction in the number vehicle parking spaces required for housing units. (H Implementation Measure 19)

4. Financial incentives may include direct financial aid including Community Development Block Grant funding, subsidization of infrastructure, or contribution from the City's affordable housing trust fund. (H Implementation Measure 19)
5. Expedite processing of planning approvals and building permits. (H Implementation Measure 17)

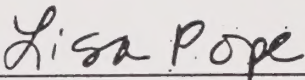
Section 7. Certification of Adoption. The City Clerk shall certify the adoption of this Resolution and to file a Notice of Determination with the Los Angeles County Clerk together with any appropriate fee or Certificate of fee exemption authorized by Fish and Game Code Section 711.2.

PASSED, APPROVED AND ADOPTED this 27th day of January, 1997



JOHN HARLOW, Mayor

ATTEST:



LISA POPE, Deputy City Clerk
(seal)

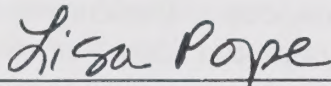
I CERTIFY THAT THE FOREGOING RESOLUTION NO. 97-001 was passed and adopted by the City Council of the City of Malibu at the regular meeting thereof held on the 27th day of January, 1997, by the following vote:

AYES: 4 COUNCILMEMBERS: Jennings, House, Keller, Van Horn

NOES: 1 COUNCILMEMBERS: Harlow

ABSENT: 0

ABSTAIN: 0



LISA POPE, Deputy City Clerk
(seal)

Interested parties may petition the court for judicial review of this decision. Pursuant to Code of Civic Procedure Section 1094.6 and Malibu Municipal Code Section 1500, any such petition of the decision approving the general plan amendment must be filed no later than the 90th day from January 27, 1997, the date in which this decision became final. Appeals of the negative declaration approval must be filed pursuant to the terms of the California Environmental Quality Act, Public Resources Code Section 21000 et seq.

EXHIBIT A

CITY OF MALIBU NEGATIVE DECLARATION NO. 96-031

PROPONENT: City of Malibu

PROJECT DESCRIPTION: A proposal to amend the General Plan Housing Element to address some of the concerns from the State Department of Housing and Community Development regarding the adequacy of the City's Housing Element. The changes to the Housing Element involve providing a more detailed explanation of the Interim Zoning Ordinance and permit processing under the Governmental Constraints section, amending the Housing Element Implementation Measures 4, 6, 17, and 19 related to the City's affordable housing incentives to better explain the relationship between these implementation measures, amend Implementation Measure 9 to identify sizes for emergency shelters and transitional housing, and amend Implementation Measure 33 clarifying the status of the City's equal housing opportunity program.

ENVIRONMENTAL SETTING: The project area encompasses the entire City of Malibu which is located on the coastal slopes of the Santa Monica Mountains and is bounded by the Pacific Ocean to the south. The topography consists of steep hillsides, coastal terraces, canyons, bluffs, and sandy beaches. Elevations within the City range from sea level to approximately 1,700 feet above sea level.

ENVIRONMENTAL DETERMINATION: None of these changes result in any new policies or implementation measures nor do they result in a substantive change to any existing policies or implementation measures; therefore, there will be no significant environmental impacts.

PROJECT LOCATION: Citywide

THE UNIVERSITY OF CHICAGO
DIVISION OF THE PHYSICAL SCIENCES
DEPARTMENT OF CHEMISTRY

1955-1956

A report on the work of the Division of the Physical Sciences during the year 1955-1956. The report is divided into two parts: a summary of the work of the Division and a list of the publications of the Division. The summary of the work of the Division is divided into three sections: a summary of the work of the Division in the field of chemistry, a summary of the work of the Division in the field of physics, and a summary of the work of the Division in the field of astronomy. The list of the publications of the Division is divided into three sections: a list of the publications of the Division in the field of chemistry, a list of the publications of the Division in the field of physics, and a list of the publications of the Division in the field of astronomy.

The report is divided into two parts: a summary of the work of the Division and a list of the publications of the Division. The summary of the work of the Division is divided into three sections: a summary of the work of the Division in the field of chemistry, a summary of the work of the Division in the field of physics, and a summary of the work of the Division in the field of astronomy. The list of the publications of the Division is divided into three sections: a list of the publications of the Division in the field of chemistry, a list of the publications of the Division in the field of physics, and a list of the publications of the Division in the field of astronomy.

The report is divided into two parts: a summary of the work of the Division and a list of the publications of the Division. The summary of the work of the Division is divided into three sections: a summary of the work of the Division in the field of chemistry, a summary of the work of the Division in the field of physics, and a summary of the work of the Division in the field of astronomy. The list of the publications of the Division is divided into three sections: a list of the publications of the Division in the field of chemistry, a list of the publications of the Division in the field of physics, and a list of the publications of the Division in the field of astronomy.

RESOLUTION NO. 96-080 ✓

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MALIBU APPROVING NEGATIVE DECLARATION NO. 96-007 AND GENERAL PLAN AMENDMENT NO. 96-002 AMENDING THE GENERAL PLAN LAND USE POLICY MAP CHANGING LAND USE DESIGNATIONS FOR VARIOUS PROPERTIES THROUGHOUT THE CITY.

The City Council of the City of Malibu does hereby Find, Order, and Resolve as follows:

Section 1. Project Description. On May 15, 1996, General Plan Amendment No. 96-002 was initiated by the City Council to amend the General Plan Land Use Policy Map. The proposed changes to the map were either identified by staff as mapping errors that occurred during the General Plan adoption process or were designations that the Planning Commission had recommended that the Council reconsider.

Section 2. Public Hearing. On July 22, 1996, the City Council conducted a duly noticed public hearing regarding the subject negative declaration and general plan amendment.

Section 3. Negative Declaration Findings. Pursuant to the authority and criteria contained in the California Environmental Quality Act (CEQA), the City Council finds as follows:

- a. Negative Declaration No. 96-007 was prepared in conformance with the provisions of the CEQA and the Negative Declaration and Initial Study reflect the independent judgment of the City.
- b. Negative Declaration No. 96-007 was noticed and circulated in accordance with CEQA and the 30 day public comment period for this negative declaration expired on July 22, 1996.
- c. No written comments have been received by the City with regard to this negative declaration.
- d. Based on the Initial Study there is no substantial evidence that the proposed amendments will have a significant environmental effect and no new environmental information has been brought forward during public hearings.

Section 4. Negative Declaration Approval. The City Council hereby approves and adopts Negative Declaration No. 96-007 attached hereto as Exhibit A, finding that the proposed amendments to the General Plan Land Use Policy Map will not have a significant adverse impact on the environment.

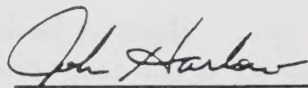
Section 5. General Plan Amendment Findings. Having heard all oral and written testimony and considered all relevant evidence and argument presented at the July 22, 1996, public hearings, the City Council in accordance with Section 9552 of the Malibu Municipal Code finds as follows:

a. The proposed amendments do not conflict with the Goals, Objectives, Policies, and Implementation Measures of the General Plan in that the proposed designations correct mapping errors that occurred during the General Plan adoption process and the new designations reflect the existing land uses, except for the redesignation from Business-Professional Office (BPO) to Single-Family Medium (SF-M) on Malibu Road. The Malibu Road redesignation results in a lower intensity of use which is compatible with the existing single-family residences to the south of the properties.

Section 6. General Plan Amendment Approval. On the basis of the foregoing findings, the City Council hereby approves General Plan Amendment No. 96-002 amending the General Plan Land Use Policy Map to change the land use designations as shown on the map attached hereto as Exhibit B.

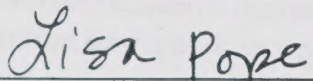
Section 7. Certification of Adoption. The City Clerk shall certify the adoption of this Resolution.

PASSED, APPROVED AND ADOPTED this 12th day of November, 1996.



JOHN HARLOW, Mayor

ATTEST:



LISA POPE, Deputy City Clerk
(seal)

I CERTIFY THAT THE FOREGOING RESOLUTION NO. 96-080 was passed and adopted by the City Council of the City of Malibu at the regular meeting held on the 12th day of November, 1996, by the following vote:

AYES:	3	COUNCILMEMBERS:	House, Keller, Van Horn
NOES:	2	COUNCILMEMBERS:	Jennings, Harlow
ABSENT:	0		
ABSTAIN:	0		

ATTEST:

Lisa Pope
LISA POPE, Deputy City Clerk
(seal)

Interested parties may petition the court for judicial review of this decision. Pursuant to Code of Civic Procedure Section 1094.6 and Malibu Municipal Code Section 1500, any such petition of the decision approving the general plan amendment must be filed no later than the 90th day from November 12, 1996, the date in which this decision became final. Appeals of the negative declaration approval must be filed pursuant to the terms of the California Environmental Quality Act, Public Resources Code Section 21000 et seq.

EXHIBIT A

CITY OF MALIBU NEGATIVE DECLARATION NO. 96-007

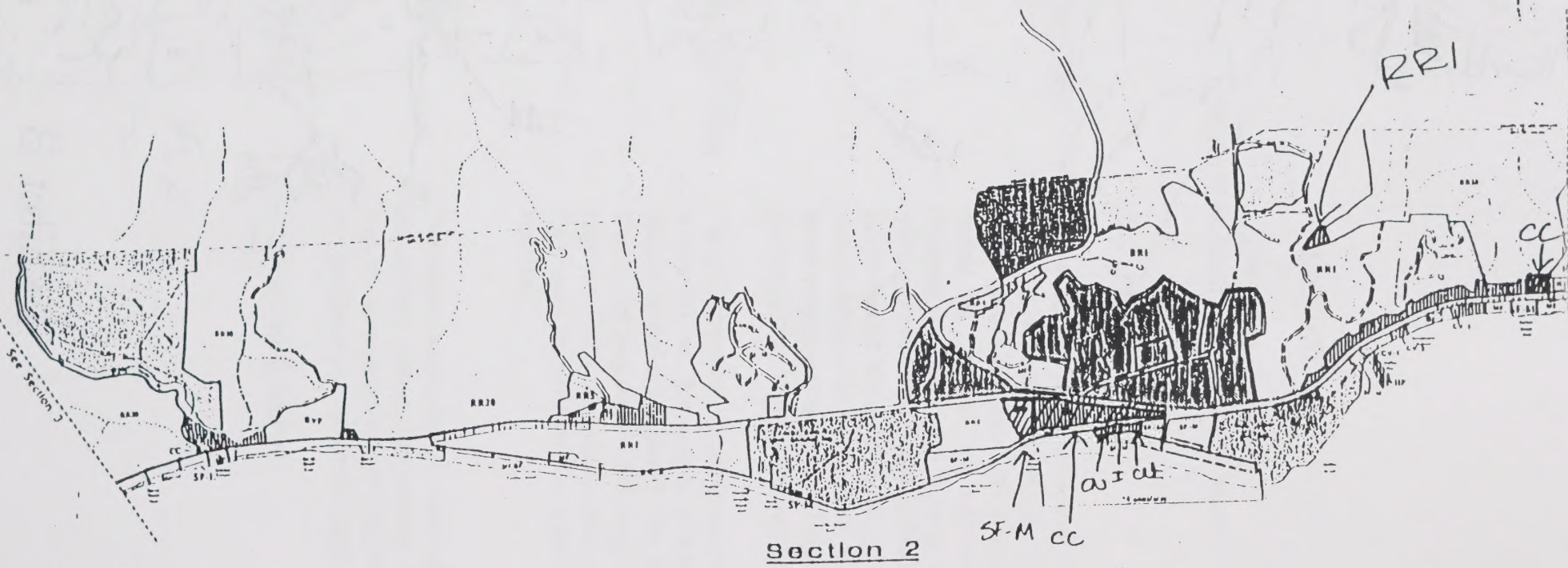
PROPONENT:	City of Malibu
PROJECT DESCRIPTION:	A proposal to amend the General Plan Land Use Policy Map changing various designations throughout the City. The proposed designations correct mapping errors that occurred during the General Plan adoption process and the new designations reflect the existing land use, except for the redesignation from Business-Professional Office (BPO) to Single-Family Medium (SF-M) on Malibu Road. The Malibu Road redesignation is a result of the Planning Commission's recommendation that the City Council reconsider various land use designations throughout the City.
ENVIRONMENTAL SETTING:	The project area encompasses the entire City of Malibu which is located on the coastal slopes of the Santa Monica Mountains and is bounded by the Pacific Ocean to the south. The topography consists of steep hillsides, coastal terraces, canyons, bluffs, and sandy beaches. Elevations within the City range from sea level to approximately 1,700 feet above sea level.
ENVIRONMENTAL DETERMINATION:	The project would result in land use designations that reflect the existing uses on the property and would be compatible with the surrounding neighborhoods; therefore, there will be no significant environmental impacts.
PROJECT LOCATION:	Citywide (see Exhibit B)

GPA 96-002

CITY OF MALIBU GENERAL PLAN

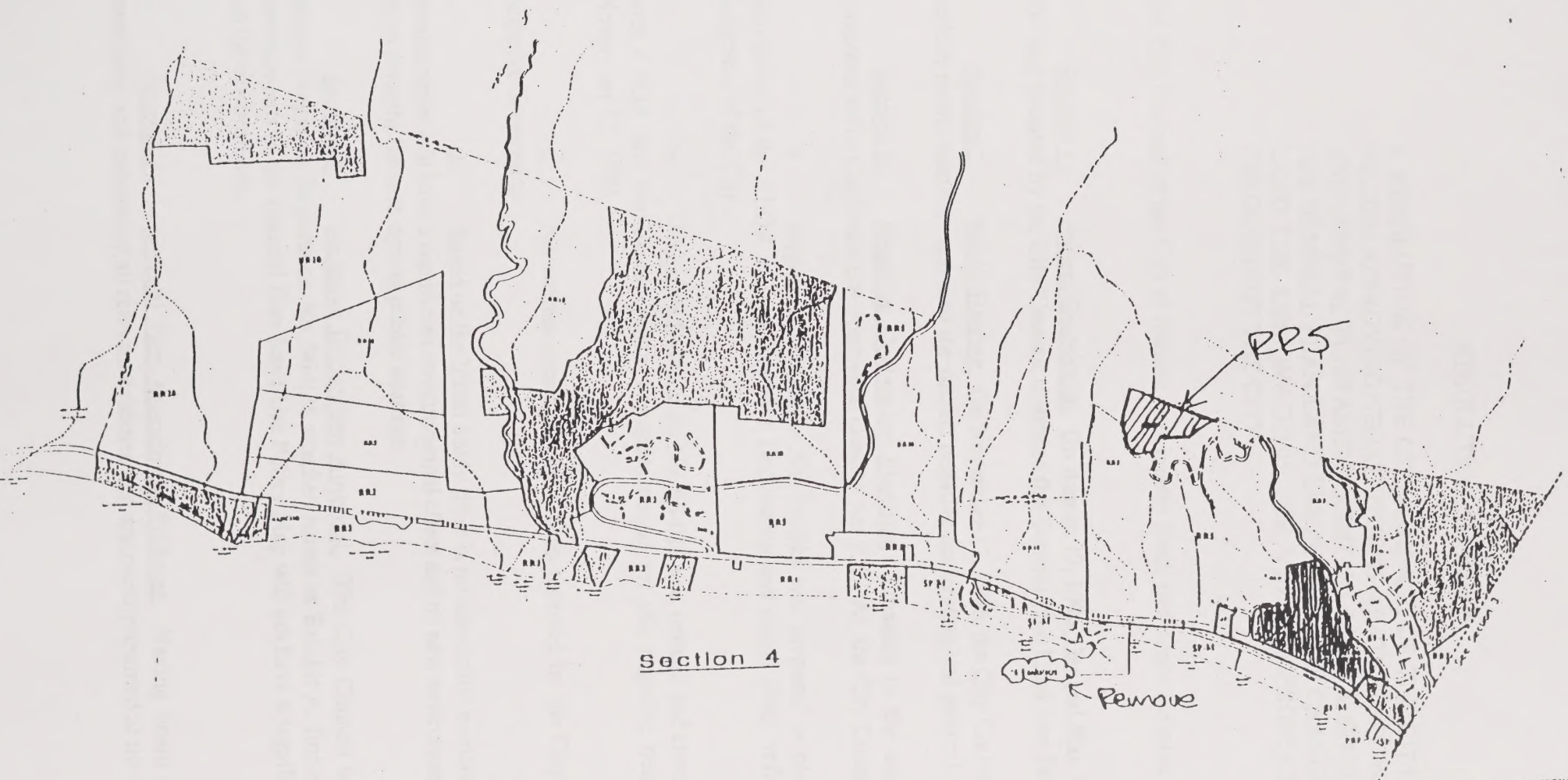
FIGURE 10-20

THE UNIVERSITY OF TEXAS AT AUSTIN



CITY OF MALIBU GENERAL PLAN
 FIGURE LU-2(C)
 LAND USE POLICY MAP SECTION 2

GPA 96-002

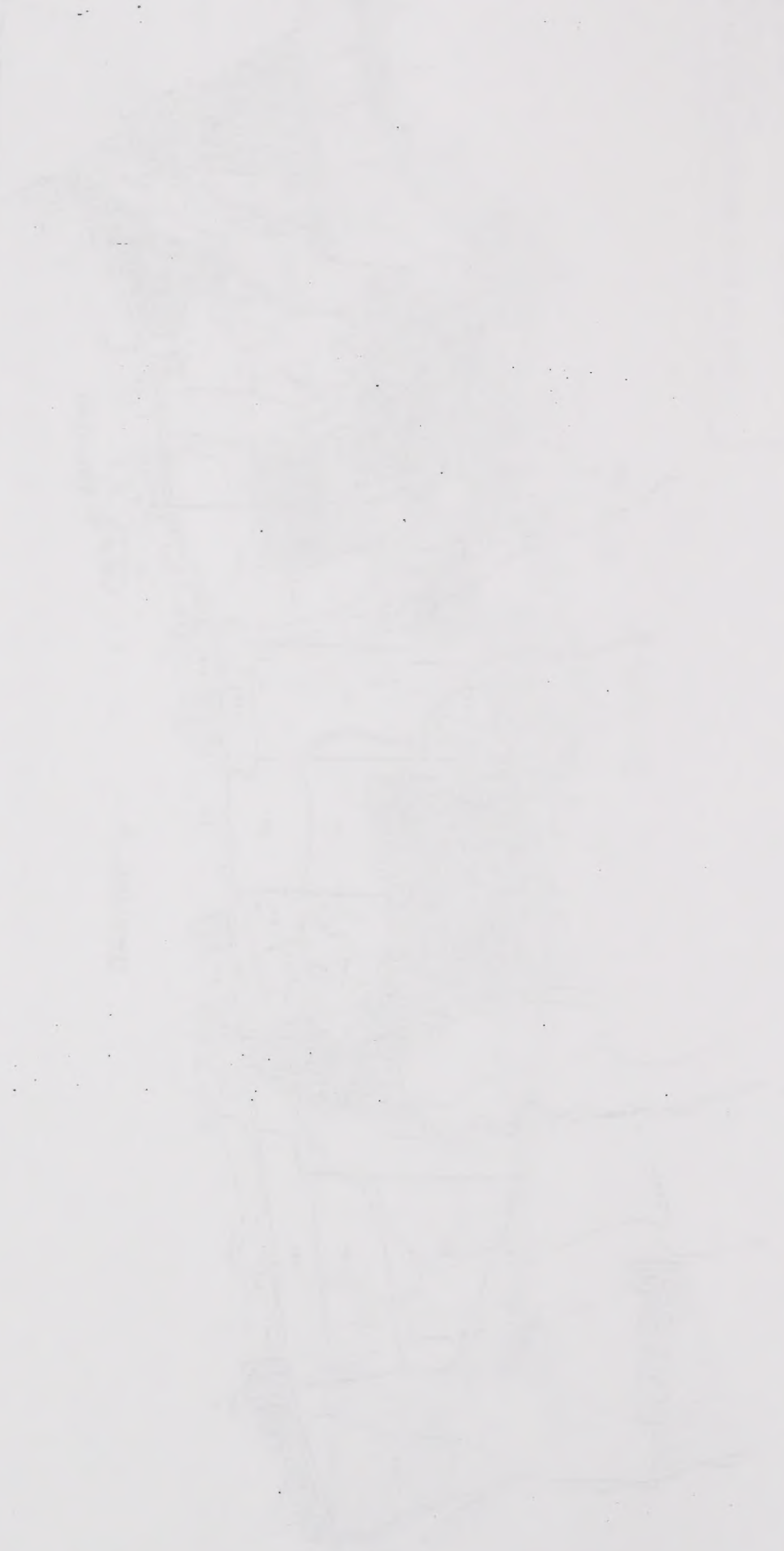


Section 4

CITY OF MALIBU GENERAL PLAN
FIGURE LU-2(E)
LAND USE POLICY MAP SECTION 4

C.P.A. 96-0522

THE UNIVERSITY OF CHICAGO
LIBRARY



RESOLUTION NO. 96-079 ✓

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MALIBU APPROVING NEGATIVE DECLARATION NO. 96-028 AND GENERAL PLAN AMENDMENT NO. 96-004 AMENDING THE GENERAL PLAN LAND USE POLICY MAP CHANGING LAND USE DESIGNATIONS FOR VARIOUS PROPERTIES THROUGHOUT THE CITY.

The City Council of the City of Malibu does hereby Find, Order, and Resolve as follows:

Section 1. Project Description. On August 12, 1996, General Plan Amendment No. 96-004 was initiated by the City Council to amend the General Plan Land Use Policy Map.

Section 2. Public Hearing. On November 12, 1996, the City Council conducted a duly noticed public hearing regarding the subject negative declaration and general plan amendment.

Section 3. Negative Declaration Findings. Pursuant to the authority and criteria contained in the California Environmental Quality Act (CEQA), the City Council finds as follows:

a. Negative Declaration No. 96-028 was prepared in conformance with the provisions of the CEQA and the Negative Declaration and Initial Study reflect the independent judgment of the City.

b. Negative Declaration No. 96-028 was noticed and circulated in accordance with CEQA and the 30 day public comment period for this negative declaration expired on November 12, 1996.

c. No written comments have been received by the City with regard to this negative declaration.

d. Based on the Initial Study there is no substantial evidence that the proposed amendments will have a significant environmental effect and no new environmental information has been brought forward during public hearings.

Section 4. Negative Declaration Approval. The City Council hereby approves and adopts Negative Declaration No. 96-028 attached hereto as Exhibit A, finding that the proposed amendments to the General Plan Land Use Policy Map will not have a significant adverse impact on the environment.

Section 5. General Plan Amendment Findings. Having heard all oral and written testimony and considered all relevant evidence and argument presented at the November 12, 1996,

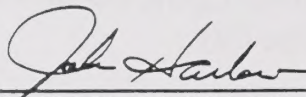
public hearings, the City Council in accordance with Section 9552 of the Malibu Municipal Code finds as follows:

a. The proposed amendments do not conflict with the Goals, Objectives, Policies, and Implementation Measures of the General Plan in that the proposed designations correct mapping errors that occurred during the General Plan adoption process and the new designations reflect the existing land uses.

Section 6. General Plan Amendment Approval. On the basis of the foregoing findings, the City Council hereby approves General Plan Amendment No. 96-004 amending the General Plan Land Use Policy Map to change the land use designations as shown on the map attached hereto as Exhibit B.

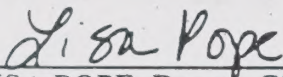
Section 7. Certification of Adoption. The City Clerk shall certify the adoption of this Resolution.

PASSED, APPROVED AND ADOPTED this 12th day of November, 1996.



JOHN HARLOW, Mayor

ATTEST:



LISA POPE, Deputy City Clerk

I CERTIFY THAT THE FOREGOING RESOLUTION NO. 96-079 was passed and adopted by the City Council of the City of Malibu at the regular meeting held on the 12th day of November, 1996, by the following vote:

AYES:	4	COUNCILMEMBERS: Jennings, House, Keller, Van Horn
NOES:	0	
ABSENT:	0	
ABSTAIN:	1	COUNCILMEMBERS: Harlow

ATTEST:

Lisa Pope
LISA POPE, Deputy City Clerk
(seal)

Interested parties may petition the court for judicial review of this decision. Pursuant to Code of Civic Procedure Section 1094.6 and Malibu Municipal Code Section 1500, any such petition of the decision approving the general plan amendment must be filed no later than the 90th day from November 12, 1996, the date in which this decision became final. Appeals of the negative declaration approval must be filed pursuant to the terms of the California Environmental Quality Act, Public Resources Code Section 21000 et seq.

EXHIBIT A

CITY OF MALIBU NEGATIVE DECLARATION NO. 96-007

PROPONENT:

City of Malibu

PROJECT DESCRIPTION:

A proposal to amend the General Plan Land Use Policy Map changing various designations throughout the City. The proposed designations correct mapping errors that occurred during the General Plan adoption process and the new designations reflect the existing land use.

ENVIRONMENTAL SETTING:

The project area encompasses the entire City of Malibu which is located on the coastal slopes of the Santa Monica Mountains and is bounded by the Pacific Ocean to the south. The topography consists of steep hillsides, coastal terraces, canyons, bluffs, and sandy beaches. Elevations within the City range from sea level to approximately 1,700 feet above sea level.

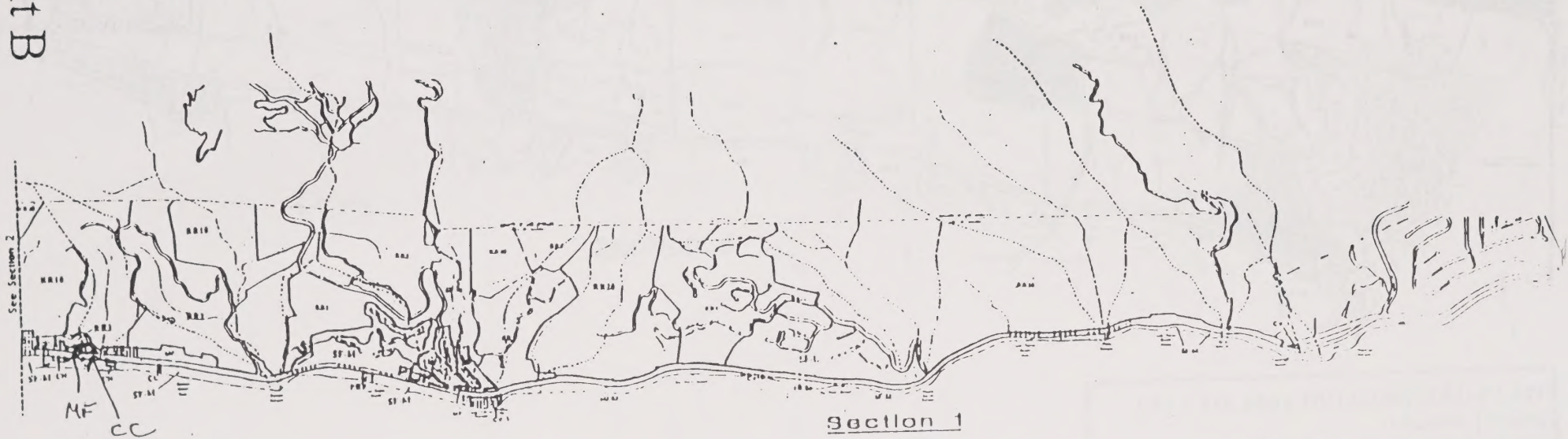
ENVIRONMENTAL
DETERMINATION:

The project would result in land use designations that reflect the existing uses on the property and would be compatible with the surrounding neighborhoods; therefore, there will be no significant environmental impacts.

PROJECT LOCATION:

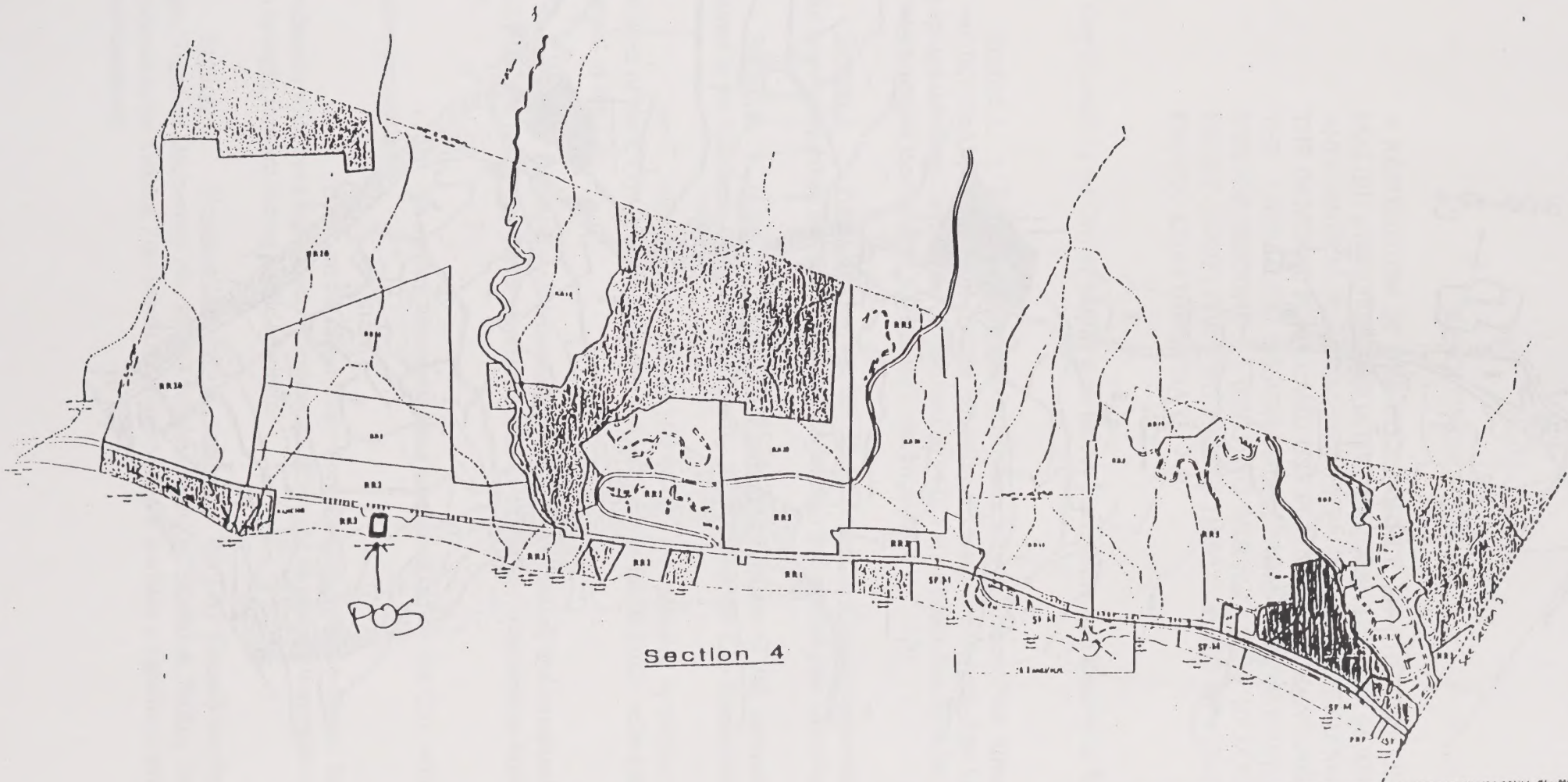
Citywide (see Exhibit B)

Exhibit B



GPA 96-004

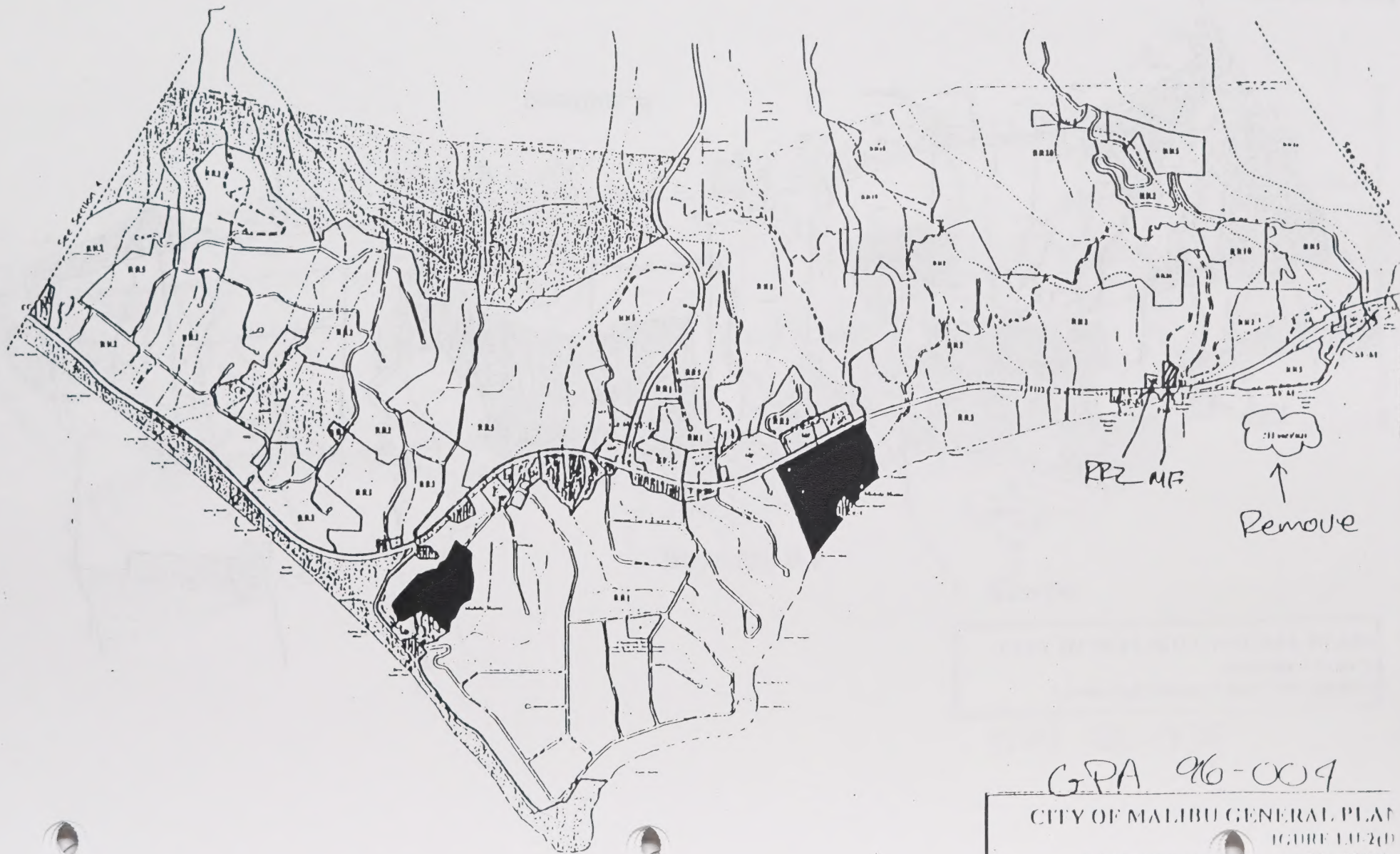
CITY OF MALIBU GENERAL PLAN
FIGURE 11-20
LAND USE POLICY MAP SECTION



Section 4

CITY OF MALIBU GENERAL PLAN
FIGURE LU-2(E)
LAND USE POLICY MAP SECTION 4

GPA 96-004



GPA 96-004

CITY OF MALIBU GENERAL PLAN

FIGURE 1A-2(D)
LAND USE PLAN
AP SECTION

RESOLUTION NO. 96-047

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MALIBU APPROVING NEGATIVE DECLARATION NO. 96-009 AND GENERAL PLAN AMENDMENT NO. 96-001 AMENDING THE GENERAL PLAN LAND USE POLICY MAP CHANGING THE LAND USE DESIGNATION FROM COMMERCIAL VISITOR SERVING - 1 (CV-1) TO MULTI-FAMILY BEACH FRONT (MFBF) FOR TWO PROPERTIES LOCATED AT 21202 PACIFIC COAST HIGHWAY.

The City Council of the City of Malibu does hereby Find, Order, and Resolve as follows:

Section 1. Project Description. On February 9, 1996, General Plan Amendment No. 96-001 was duly filed by Mr. Ralph B. Herzig requesting to change the General Plan Land Use Policy Map designation from Commercial Visitor Serving - 1 (CV-1) to Multi-Family Beach Front (MFBF) for two properties located at 21202 Pacific Coast Highway.

Section 2. Public Hearing. On July 22, 1996, the City Council conducted a duly noticed public hearing regarding the subject negative declaration and general plan amendment.

Section 3. Negative Declaration Findings. Pursuant to the authority and criteria contained in the California Environmental Quality Act (CEQA), the City Council finds as follows:

a. Negative Declaration No. 96-009 was prepared in conformance with the provisions of the CEQA and the Negative Declaration and Initial Study reflect the independent judgment of the City.

b. Negative Declaration No. 96-009 was noticed and circulated in accordance with CEQA and the 30 day public comment period for this negative declaration expired on July 22, 1996.

c. No written comments have been received by the City with regard to this negative declaration.

d. Based on the Initial Study there is no substantial evidence that the proposed amendments will have a significant environmental effect and no new environmental information has been brought forward during public hearings.

Section 4. Negative Declaration Approval. The City Council hereby approves and adopts Negative Declaration No. 96-009 attached hereto as Exhibit A, finding that the proposed amendment to the General Plan Land Use Policy Map will not have a significant adverse impact on the environment.

Section 5. General Plan Amendment Findings. Having heard all oral and written testimony and considered all relevant evidence and argument presented at the July 22, 1996, public hearings, the City Council in accordance with Section 9552 of the Malibu Municipal Code finds as follows:

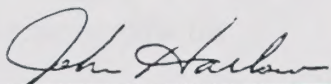
a. The proposed amendment does not conflict with the Goals, Objectives, Policies, and Implementation Measures of the General Plan in that the proposed Multi-Family Beach Front (MFBF) land use designation will provide for residences consistent with the surrounding properties and will have fewer traffic impacts than the existing Commercial Visitor Serving - 1 (CV-1) land use designation.

b. The subject properties are suitable for the uses permitted and conditionally permitted in the proposed Multi-Family Beach Front (MFBF) land use designation in that there is adequate room on the property that is the former site of the Albatross to locate four multi-family residences.

Section 6. General Plan Amendment Approval. On the basis of the foregoing findings, the City Council hereby approves General Plan Amendment No. 96-001 amending the General Plan Land Use Policy Map change the land use designation from Commercial Visitor Serving - 1 (CV-1) to Multi-Family Beach Front (MFBF) for two properties located at 21202 Pacific Coast Highway as shown on the map attached hereto as Exhibit B.

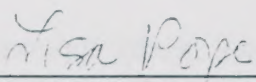
Section 7. Certification of Adoption. The City Clerk shall certify the adoption of this Resolution.

PASSED, APPROVED AND ADOPTED this 22nd day of July, 1996.



JOHN HARLOW, Mayor

ATTEST:



LISA POPE, Deputy City Clerk
(seal)

I CERTIFY THAT THE FOREGOING RESOLUTION NO. 96-047 was passed and adopted by the City Council of the City of Malibu at the regular meeting thereof held on the 22nd day of July, 1996, by the following vote:

AYES: 5 Councilmembers: Harlow, Jennings, House, Keller, Van Horn

NOES: 0

ABSENT: 0

ABSTAIN: 0

Lisa Pope

LISA POPE, Deputy City Clerk
(seal)

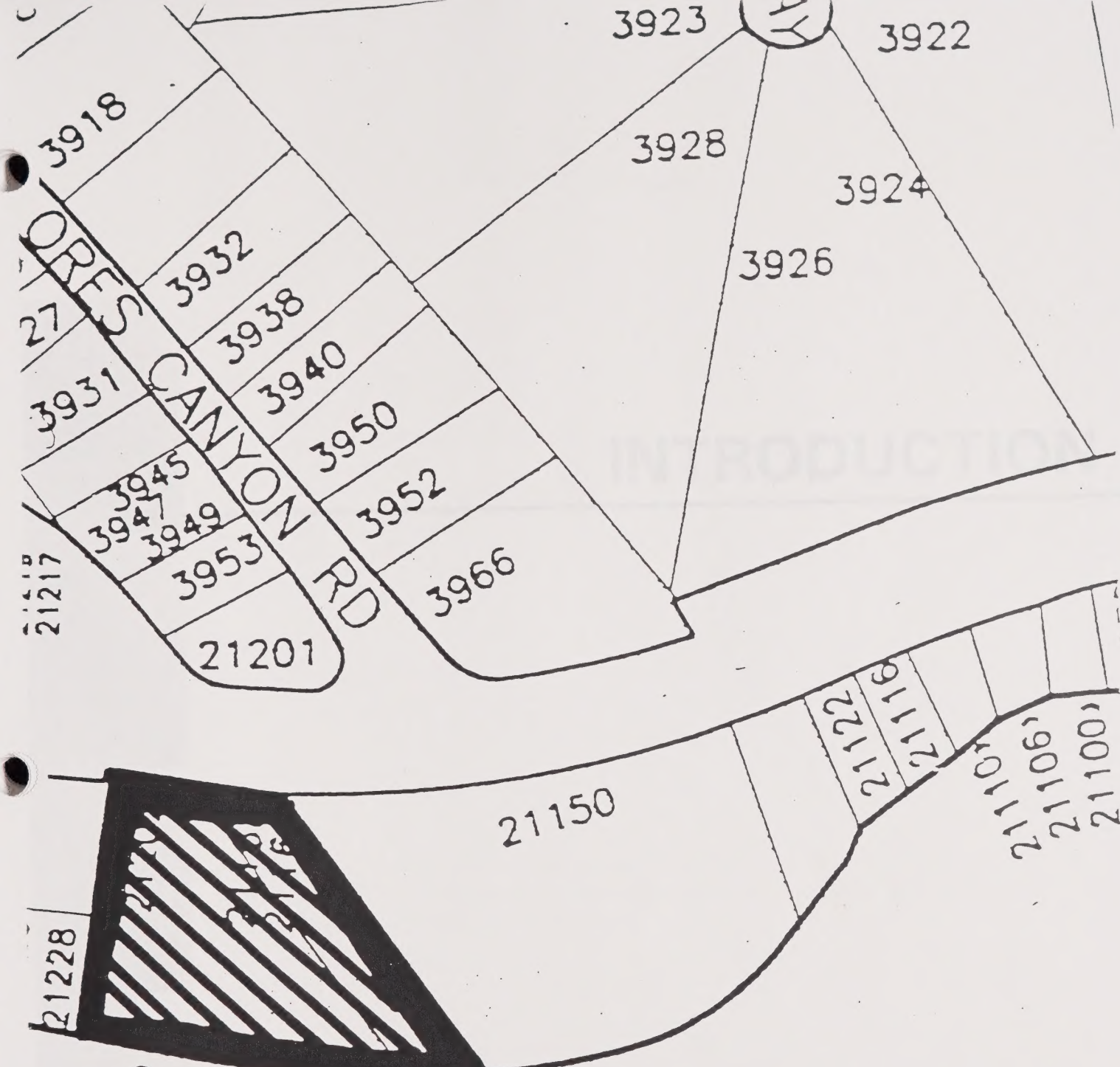
Interested parties may petition the court for judicial review of this decision. Pursuant to Code of Civic Procedure Section 1094.6 and Malibu Municipal Code Section 1500, any such petition of the decision approving the conditional use permit and tentative tract map amendment must be filed no later than the 90th day from July 22, 1996, the date in which this decision became final. Appeals of the negative declaration approval must be filed pursuant to the terms of the California Environmental Quality Act, Public Resources Code Section 21000 et seq.

SUBJECT
PROPERTIES

EXHIBIT A

CITY OF MALIBU NEGATIVE DECLARATION NO. 96-009

- PROPONENT: Mr. Ralph B. Herzig
- PROJECT DESCRIPTION: A proposal to amend the General Plan Land Use Policy Map changing the land use designation from Commercial Visitor Serving - 1 (CV-1) to Multi-Family Beach Front (MFBF) for two properties located at 21202 Pacific Coast Highway.
- ENVIRONMENTAL SETTING: The project site consists of the remnants of a foundation system for a former restaurant and hotel and a flood control channel. The entire site has been disturbed with no remaining native habitat and has no importance for habitat connectivity. The properties to the north are developed with a florist/nursery, the Pacific Ocean is to the south, the properties to the east are developed with a restaurant and a former, apartment building, and the properties to the west are developed with an automobile service station and a multi-family complex.
- ENVIRONMENTAL DETERMINATION: The project would allow for 4 multi-family units which are less intensive than the visitor serving uses currently allowed by the General Plan; therefore, there will be no significant environmental impacts.
- PROJECT LOCATION: 21202 Pacific Coast Highway.



↑
**SUBJECT
PROPERTIES**

Exhibit B

INTRODUCTION

Table of Contents

<u>Section/Chapter</u>	<u>Page</u>
I Introduction	I-1
II Elements of the General Plan	
1.0 Land Use	1-1
2.0 Open Space and Recreation	2-1
3.0 Conservation	3-1
4.0 Circulation and Infrastructure	4-1
5.0 Safety and Health	5-1
6.0 Noise	6-1
7.0 Housing	7-1
III Appendices	
A. Glossary of Terms	A-1

* The Environmental Impact Report (EIR) is available in a separate volume. In addition, various technical reports (such opportunities and constraints reports) are available in separately bound volumes available at City Hall.

Vision and Mission Statements

The General Plan Vision and Mission statements were prepared by the General Plan Task Force and subsequently adopted by the City Council prior to the development of the goals, objectives, policies and implementation programs by the General Plan Task Force and the City's planning consulting team. The statements guide the formation of programs and policies that are included in the General Plan.

Vision Statement - Malibu is a unique land and marine environment and residential community whose citizens have historically evidenced a commitment to sacrifice urban and suburban conveniences in order to protect that environment and lifestyle, and to preserve unaltered natural resources and rural characteristics. The people of Malibu are a responsible custodian of the area's natural resources for present and future generations.

Mission Statement - *Malibu* is committed to ensure the physical and biological integrity of its environment through the development of land use programs and decisions, to protect the public and private health, safety and general welfare.

Malibu will plan to preserve its natural and cultural resources, which include the ocean, marine life, tide pools, beaches, creeks, canyons, hills, mountains, ridges, views, wildlife and plant life, open spaces, archaeological, paleontological and historic sites, as well as other resources that contribute to Malibu's special natural and rural setting.

Malibu will maintain its rural character by establishing programs and policies that avoid suburbanization and commercialization of its natural and cultural resources.

Malibu will gradually recycle areas of deteriorated commercial development that detract from the public benefits or deteriorate the public values of its natural, cultural and rural resources.

Malibu will provide passive, coastal-dependent and resource-dependent visitor-serving recreational opportunities (at proper times, places and manners) that remain subordinate to their natural, cultural and rural setting, and which are consistent with the fragility of the natural resources of the area, the proximity of the access to residential uses, the need to protect the privacy of property owners, the aesthetic values of the area, and the capacity of the area to sustain particular levels of use.

1.1 Introduction**1.1.1****Legislative Authorization**

The Land Use Element has the broadest scope of any of the mandated General Plan elements. Government Code, Section 65302(a), indicates that this element must designate the distribution, location, and extent of the various land uses considered in the General Plan:

A land use element which designates the proposed general distribution and general location and extent of the uses of the land for housing, business, industry, open space, including agriculture, natural resources, recreation, enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid waste disposal facilities, and other categories of public and private uses of land. The land use element shall include a statement of the standards of population density and building intensity recommended for the various districts and other territory covered by the plan. The land use element shall also identify areas covered by the plan which are subject to flooding and shall be reviewed annually with respect to such areas.

According to the State code, the location of a particular land use may be expressed in general terms on a map. However, a property owner must be able to identify the General Plan designation for his or her parcel from the land use map or diagram contained in the Land Use Element. The zoning ordinance and zoning map must be consistent with the General Plan. The Land Use Element must also contain standards for population density and building intensity for those areas governed by the General Plan. These standards must be provided for all land use categories indicated on the map.

1.1.2 Purpose and Scope

Through text, tables, neighborhood descriptions, and maps, the City of Malibu Land Use Element establishes a pattern of land use and clearly identifies the standards described above. The Land Use Element and neighborhood descriptions, along with the zoning code and map, serve as a guide for future development.

The Land Use Policy Map for the City of Malibu, which is included in this element, is a diagram which indicates the distribution of land use designations geographically throughout the City. The Land Use Policy Map is a diagram which illustrates the location and extent of these designations. To a large extent, the Map reflects the existing character of development in Malibu. Where property is already subdivided into legal lots, actual densities may be higher than indicated on the Land Use Policy Map. As a result, the overall distribution of land uses in the City will not change significantly. Residential development will remain the dominant land use in Malibu aside from the expansive areas of open space located primarily in the northern part of the City. Background descriptions of residential neighborhoods in Malibu are included as an appendix to this element.

The Draft Malibu General Plan contains the following seven state-mandated elements:

- **Land Use Element**: Contains an analysis of the existing land uses in the City and designates areas where different types of land uses are desirable and allowed including standards for population density and building intensity.
- **Conservation Element**: Contains a plan for the conservation of natural resources, including water, land, soils, animal and plant life, and other natural resources in the City and adjacent areas.
- **Open Space and Recreation Element**: Contains an analysis of the open space lands and an action program for their preservation and conservation, scenic enjoyment, recreation and use of natural resources.
- **Circulation and Infrastructure Element**: Contains roads and highways to be correlated with the land use plan. It also includes programs and policies that will provide for an efficient transportation network in the area. An acceptable map of trails is being developed and will be included with a trails plan in a succeeding amendment to the Plan. The circulation system has been designed to accommodate public transit services. This element also analyzes the organization of public services and utilities in the City, provides mechanisms to coordinate future service expansion, and evaluates service capacities and demands.
- **Safety and Health Element**: Discusses the hazards associated with earthquakes, slope instability, flooding, geologic faulting, fires, coastal erosion, tsunamis, and other locally present hazards, and presents ways to protect the City from these risks through independent programs and standards. Emergency plans and resources are identified for coordination efforts in minimizing property damage and casualty during natural or man-made disasters.
- **Noise Element**: Identifies the noise problems in the City as related to Pacific Coast Highway and other major roads in the City, as well as specific noise-generating uses. It provides goals and programs to keep noise within acceptable levels for human activity.
- **Housing Element**: Contains an analysis of the existing population and housing stock, and provides ways for meeting the housing needs of current and future residents of the City, and to meet the City share of regional housing and employment needs. It addresses special housing needs and housing for lower income households.

All of these elements, taken together, establish a comprehensive plan, setting forth a consistent guide to future development in the City. All development plans, zoning and

subdivision ordinances, coastal development permits and conditional use permits of the City are required to be consistent with the General Plan.

In addition, the General Plan relates to several requirements of the California Coastal Act; Appendix B to this General Plan provides a cross-reference of General Plan goals, objectives, policies and implementation measures that directly relate to requirements of the Coastal Act.

I.3 The Planning Process

The Draft General Plan is intended to be a reflection of the needs and goals of residents, property owners, the business community, and others who have an

interest in the City of Malibu. In order to ensure a wide variety of public input and a truly representative plan, public participation was encouraged through the planning process. Citizen participation was invited during all phases of the plan preparation with notices, newsletters, and news articles made at each step of the plan.

The General Plan Task Force (GPTF) was appointed by the City Council to guide the preparation of the Draft General Plan. Although membership of the GPTF changed over time, during the preparation of the Draft General Plan in 1992-93, the 23 members of the GPTF represented all sectors of the community and different neighborhoods in the City. A cross-section of residents served on the GPTF to ensure that all concerns were represented in the opinions and preferences expressed. The GPTF identified the major issues and concerns facing the City and subsequently drafted goals, objectives, policies, and implementation measures as well as a draft Land Use Policy Map. Citizen issues and concerns were gathered through public meetings, public comment and participation in regularly scheduled GPTF meetings, workshops, neighborhood meetings, and written input. The concerns were addressed during the formulation of the goals, objectives and policies.

A series of 13 neighborhood meetings conducted throughout the community by the GPTF in the spring and summer of 1991, attended by over 500 persons, identified the initial issues, concerns and preferences of the community. A community survey interview was conducted in March, 1992 by the City's planning consulting team's public participation specialists --- Moore, Iacofano and Goltsman (MIG) --- and gathered more detailed and focused citizen concerns regarding each general plan element. MIG surveyed 15 people from the community, including City Council members, GPTF members, and members from the community chosen by the City Council. The citizens in both interview processes were asked to express their views on planning issues and the future of Malibu.

A town hall meeting was held on May 27, 1992 by the City's planning consultant to explain the General Plan process to residents and interested individuals. An explanatory document and opinion poll was distributed to participants. Subsequently, a series of three community workshops were held on June 3, 4 and 6, 1992 to identify specific issues to be addressed in the General Plan and suggestions for possible solutions to perceived deficiencies.

Malibu General Plan

In October, 1992 a mail-in survey was distributed to over 6,000 Malibu households and property owners, which was followed by a second series of neighborhood meetings held October 24-25, 1992. A second series of workshops were held in August, 1993 to present the GPTF's preliminary set of draft goals, objectives, policies and implementation measures and to obtain both oral and written comments from the public. The GPTF's Draft Goals, Objectives, Policies and Implementation Programs and the Land Use Policy Map were then amended and finalized. In order to assure internal consistency and legal conformance of the Draft Goals, Objectives, Policies and Implementation Programs, a GPTF subcommittee participated with the consultant, their legal subconsultant and City Planning Department staff in a concentrated review of the GPTF's finalized draft document prior to submission to the City Council. The draft was then transmitted to the City Council and the Council held an additional 55 public hearings to receive public input on the document. The Draft General Plan was revised pursuant to City Council direction after these hearings and the official Draft General Plan was then prepared and released.

LAND USE ELEMENT

Land Use Element Table of Contents

1.1	Introduction	1
1.1.1	Legislative Authorization	1
1.1.2	Purpose and Scope	1
1.1.3	Relationship to Other Elements	2
1.1.4	Relationship to the Local Coastal Program	2
1.2	Existing Conditions	3
1.2.1	Characteristics of Development	3
1.2.2	Land Use Trends	15
1.3	Proposed Land Uses (Land Use Policy Map)	16
1.4	Goals, Objectives, Policies and Implementation Measures	26
LAND USE DESIGNATIONS		46
Appendix A - Neighborhood Descriptions		49

1.1 Introduction

1.1.1 Legislative Authorization

The Land Use Element has the broadest scope of any of the mandated General Plan elements. Government Code, Section 65302(a), indicates that this element must designate the distribution, location, and extent of the various land uses considered in the General Plan:

A land use element which designates the proposed general distribution and general location and extent of the uses of the land for housing, business, industry, open space, including agriculture, natural resources, recreation, enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid waste disposal facilities, and other categories of public and private uses of land. The land use element shall include a statement of the standards of population density and building intensity recommended for the various districts and other territory covered by the plan. The land use element shall also identify areas covered by the plan which are subject to flooding and shall be reviewed annually with respect to such areas.

According to the State code, the location of a particular land use may be expressed in general terms on a map. However, a property owner must be able to identify the General Plan designation for his or her parcel from the land use map or diagram contained in the Land Use Element. The zoning ordinance and zoning map must be consistent with the General Plan. The Land Use Element must also contain standards for population density and building intensity for those areas governed by the General Plan. These standards must be provided for all land use categories indicated on the map.

1.1.2 Purpose and Scope

Through text, tables, neighborhood descriptions, and maps, the City of Malibu Land Use Element establishes a pattern of land use and clearly identifies the standards described above. The Land Use Element and neighborhood descriptions, along with the zoning code and map, serve as a guide for future development.

The Land Use Policy Map for the City of Malibu, which is included in this element, is a diagram which indicates the distribution of land use designations geographically throughout the City. The Land Use Policy Map is a diagram which illustrates the location and extent of these designations. To a large extent, the Map reflects the existing character of development in Malibu. Where property is already subdivided into legal lots, actual densities may be higher than indicated on the Land Use Policy Map. As a result, the overall distribution of land uses in the City will not change significantly. Residential development will remain the dominant land use in Malibu

aside from the expansive areas of open space located primarily in the northern part of the City. Background descriptions of residential neighborhoods in Malibu are included as an appendix to this element.

The Malibu Land Use Element is designed to provide maximum social, economic and environmental benefits for City residents through planned distribution, location and intensity of land use. The element promotes a balanced and functional mix of land uses, guide public and private investment, reflect land use opportunities and constraints identified in other General Plan elements, and reduce hazards. The Land Use Element presents a background of land use data necessary to understand the current land use needs; with other elements, identify issues and constraints confronting future development; establish goals, objectives and policies; and identify implementation programs to guide the long term physical growth of the community.

1.1.3 Relationship to Other Elements

The Land Use Element is considered the key element of any general plan because of its broad scope. This element plays a central role in synthesizing all General Plan issues, constraints and opportunities. It was prepared to ensure consistency with the information, policies, and programs contained in the Circulation, Housing, Open Space, Conservation, Safety, and Noise elements of the General Plan and Local Coastal Plan.

1.1.4 Relationship to the Local Coastal Program

The California Coastal Act requires each community within the coastal zone to prepare a Local Coastal Program (LCP) including a coastal Land Use Plan to protect, maintain, and, where feasible, enhance and restore the overall quality of the coastal zone environment and its natural resources. An LCP consists of land use plans, zoning ordinances and zoning district maps. LCPs must contain a specific public access component to assure maximum public access to the coast and that public recreation areas are provided.

The entire City of Malibu is located within the Coastal Zone as defined by the Coastal Act. The Coastal Zone boundaries extend several miles north of the City limits. Portions of this area represent land which Malibu may seek to annex as its Sphere of Influence in the future. In addition to the coastal and marine resources, there are significant natural terrestrial resources both within the City boundaries and the Coastal Zone. Some of the habitat areas within the Coastal Zone adjoin the City and its jurisdiction by the City boundaries. The City, therefore, has a significant interest in protecting and preserving these resources.

Prior to the City of Malibu's incorporation, a draft Local Coastal Program Land Use Plan (LUP) was prepared by the County of Los Angeles in 1982; this LUP was not accepted by the California Coastal Commission. A revised draft LUP was then prepared by the County and approved by the Coastal Commission in 1986. After

approval, Los Angeles County did not implement the LCP by completing ordinances such as zoning ordinance revisions or zoning maps. As a rule, the issues addressed in a city's LUP are addressed in its general plan. However, the LUP places more emphasis on certain issue areas. As Malibu completes its General Plan, the Malibu LUP will be prepared. The new Malibu LUP will reflect the goals and preferences of the City as set forth in its General Plan. In addition, many of the issues addressed in the General Plan will also be addressed in the Malibu LUP. The LCP will be completed in conjunction with the City's zoning ordinance.

1.2 Existing Conditions

The following provides a summary and an overview of existing land uses in the City of Malibu. The material is based on

information in the Land Use Background Report, which is provided in the Technical Appendix to the Malibu General Plan.

1.2.1 Characteristics of Development

Malibu was developed as a residential community with occasional neighborhood service facilities such as a restaurant or grocery store located on or adjacent to Pacific Coast Highway. The area remains a "haven" for people who prefer a quiet, small coastal town close to Los Angeles or other urban centers. Most residents live in the community all year and others visit seasonally or whenever they can leave the urban area.

Development in Malibu first occurred along the coast in the late 1920s. As Malibu grew, those seeking ocean views with more privacy expanded into the canyons and hillsides. As a result the City reflects characteristics of both a beach area and a rural community.

The City has retained its rural residential characteristic. Small businesses such as real estate, law firms and medical practices are located in Malibu, but only as neighborhood serving enterprises. The local employment base remains focused in a few major employers such as the Hughes research facility and, adjacent to the City, Pepperdine University. Many residents commute to Santa Monica, Los Angeles, the San Fernando Valley or Ventura County.

The more intensive land uses, such as commercial and multi-family, have tended to cluster on both sides of Pacific Coast Highway. Single family residential neighborhoods are scattered in the hills. Although the City is characterized by vast amounts of vacant land, only a small portion is suitable for development because of the following constraints: steep hillsides, unstable soil and subsurface conditions, extreme fire hazard, and sensitive environmental resources.

Prior to incorporation, land use planning in the City was governed by the Malibu Land Use Plan (LUP) and the County of Los Angeles Zoning Ordinance. The existing distribution and extent of development in Malibu is a reflection of the planning practices of both the County of Los Angeles and the California Coastal Commission. The City is dominated by three land uses --- open space (approximately 15 percent of the City), vacant land (approximately 60 percent of the City), and residential land (22 percent). Table 1-1 provides the distribution of existing land uses within the City.¹ Similar land uses have been grouped together. A generalized land use map indicating the location and extent of existing land uses is provided in Figure LU-1A to LU1-D.

Residential

Residential land uses constitute the majority of developed land. Residential uses include single-family, multiple-family, and mobile home developments (as shown in Table 1-1, Existing Land Use).

¹The land use map, land use designations (the descriptions of the designations are contained in the Southern California 1990 Aerial Land Use Study, Land Use Level III/IV Classification prepared by Aerial Information Systems), and associated acreage, were data provided by the County of Los Angeles Department of Regional Planning. The data for the map was developed using 1990 aerial photographs and a computer mapping program, Geographical Information System (GIS). This data was verified by members of the Malibu General Plan Task Force, confirmed by windshield survey by HBA staff, and compared against existing subdivisions. The acreage was measured by planimeter. Due to the use of aerial photographs a margin of error should be assumed. For purposes of this analysis, it is assumed this error is random and does not effect the general distribution of land uses in the City.

**Insert
Exhibit LU-1A**

10-10-1974

The following information was obtained from the records of the
Department of the Interior, Bureau of Land Management, regarding
the status of the land owned by the United States in the
vicinity of the town of [redacted] in the
County of [redacted] State of [redacted].
The land is located in the [redacted] section of the
Township of [redacted] Range of [redacted] and
is owned by the United States in fee simple.
The land is currently being used for [redacted] and
is subject to the following conditions:
1. The land is to be used for [redacted] purposes only.
2. The land is to be managed in accordance with the
Bureau of Land Management's policies and procedures.
3. The land is to be protected from [redacted] activities.
4. The land is to be maintained in its natural state.

Page 1
B-101-10000

Approved: [redacted]
Special Agent in Charge, Bureau of Land Management
Washington, D.C.

Approved: [redacted]

The following information was obtained from the records of the
Department of the Interior, Bureau of Land Management, regarding
the status of the land owned by the United States in the
vicinity of the town of [redacted] in the
County of [redacted] State of [redacted].
The land is located in the [redacted] section of the
Township of [redacted] Range of [redacted] and
is owned by the United States in fee simple.
The land is currently being used for [redacted] and
is subject to the following conditions:
1. The land is to be used for [redacted] purposes only.
2. The land is to be managed in accordance with the
Bureau of Land Management's policies and procedures.
3. The land is to be protected from [redacted] activities.
4. The land is to be maintained in its natural state.

Approved: [redacted]
Special Agent in Charge, Bureau of Land Management
Washington, D.C.

**Insert
Exhibit LU-1B**

Page 12

**Insert
Exhibit LU-1C**

EXHIBIT 11-10

**Insert
Exhibit LU-1D**

Page No. 1-9
This page left intentionally blank.

Page 1 of 1
The page is intentionally blank.

**Table 1-1
Existing Land Use**

LAND USE TYPE	NO. of UNITS	NO. of ACRES	% OF LAND	
			Total	Type
Residential				
Single family	4,024	2,429.9	19.4	89.8
Multi-family (including all attached units)	911	175.3	1.4	6.5
Mobile homes	688	101.8	0.8	3.8
Total Residential	5,623	2,707.0	21.6	100.0
Commercial				
Retail stores and commercial services		144.9	1.2	78.4
Commercial recreational (bowling alleys, roller rinks, miniature golf, isolated driving ranges, amusement parks, commercial stadia, fairgrounds, gambling facilities, drive-in movie theaters, indoor shooting ranges, horse and car racing facilities)		40.0	3.1	21.6
Total Commercial	769,000 sq. ft.	184.9	1.5	100.0
Research and Development		17.7	0.2	100.0
Public and Semi-Public Facilities Includes government offices, sheriff stations, fire stations, religious facilities, health care facilities, libraries, community centers, and educational institutions		169.4	1.3	100.0
Horticulture Includes irrigated and non-irrigated cropland, improved pasture land, orchards, vineyards, nurseries, dairies, livestock, poultry, and other agriculture		24.8	0.2	100.0
Open Space Includes regional and local parks, wildlife preserves, arboreta, beach parks, and open space/recreation		1,869.9	14.9	100.0
Vacant Includes land reserved or dedicated for open space		7,578.3	60.4	100.0
TOTAL LAND USE ACREAGE		12,552	100.0	100.0
* Percentages may not total to 100 due to rounding errors Sources: County of Los Angeles Regional Planning Department, City of Malibu General Plan Task Force and Harland Bartholomew and Associates, 1990				

Single Family - The single family residential category includes high density (more than two units per acre) and low density (less than two units per acre) uses. The lower density single-family development is more dominant than higher density development. Higher densities are generally found along the beaches while low density development is in the hillsides and canyon areas of the City.

Single family homes sit on lots ranging from small clusters of approximately 10,000 square feet up to large parcels of 40 acres or more. Single family homes dominate

both the coastline and the canyons and hillsides from the City boundary on the east to approximately one mile west of Carbon Canyon Road. Residential neighborhoods are found along canyons such as Big Rock, Las Flores, Rambla Pacifico and Carbon Canyon.

Between Carbon Canyon and Puerco Canyon, there are concentrations of single family homes interspersed with other types of development. These residential neighborhoods are primarily located along the beach, in the hills above the Civic Center, adjacent to Pepperdine University, and clustered near the arterial roadways. Puerco Canyon is the least developed for single family residential. The area located between Latigo Canyon and the western city limits is characterized by single family homes on both sides of Pacific Coast Highway extending into the hillsides. The largest concentration of residential neighborhoods is in the Point Dume area and the Malibu Park area, north of Pacific Coast Highway and Zuma Beach. Residential development is the primary land use along the coast between Malibu Park and the western boundary of the City, although there are higher density multi-family developments in the Civic Center area as well as in the Trancas Beach area.

Several rural-like residential neighborhoods exist in Malibu. Rural-like residential homes are located in an open setting and include backyard animal shelters, corrals, or pens for non-commercial horses or livestock. These areas contain both high and low density residential properties. The majority of the low density rural-like residential neighborhoods are located in the hillsides between Corral Canyon, Latigo Canyon and Ramirez Canyon. Higher density areas are located seaward of Pacific Coast Highway and Corral Canyon road. Several pockets of rural-like residential neighborhoods are also found just west of Trancas Canyon and along Decker Canyon. In addition, there is a rural-like residential area located in the eastern portion of the City adjacent to the northern City boundary along Carbon Canyon Road, although most of the parcels along Carbon Canyon Road are 1 and 2 acres in size.

Multi-Family - 175.3 acres (or 6.5 percent of all land developed in Malibu for residential use) is multi-family. This category includes:

- Duplexes, triplexes and two or three unit townhouses and condominiums;
- Low-rise apartments, condominiums or townhouses, mostly two stories in height, with 10 to 18 units per acre; and,
- Medium-rise apartments or condominiums, between three and four stories in height with more than 18 units per acre.

The majority of multi-family units in the City are low rise apartments, condominiums or townhouses. There are three areas of duplex, triplex or fourplex type units: along the coast between Las Tunas and Las Flores Canyon Drive, east of Malibu Colony, and on Point Dume on Dume Drive. The only area which contains medium-rise

apartments is located north of Pacific Coast Highway and west of Kanan Dume Drive. In addition, there are medium-rise condominiums at Pacific Coast Highway and Zumeriz Road.

The largest concentration of multi-family residential is located in the westerly areas of the Civic Center north of Pacific Coast Highway. There are a few pockets of multi-family development scattered east of this area around Las Flores Canyon and between Puerco Canyon and Latigo Canyon south of Pacific Coast Highway. In the Point Dume area there are multi-family residential units located both north and south of Pacific Coast Highway. The only remaining two areas of multi-family development are located along Trancas Canyon and immediately west.

Mobile Homes - This category includes mobile homes, trailers and pre-fabricated housing which are either stationary with foundations or are capable of being moved. There are two mobile home parks in Malibu which account for about 101.8 acres or 3.8 percent of all residential development. The two parks are both located south of Pacific Coast Highway. The first is the Paradise Cove Mobile Home Park, located just east of Point Dume and the second is the Point Dume Mobile Home Park.

Commercial - Since it has been determined to retain its rural environment, there has been no emergence of a commercial center in the traditional sense. There are only about 184.9 acres of commercial land uses in the City which account for less than 2 percent of all land uses in the City. The stretch of Pacific Coast Highway just west of Carbon Canyon Road through the Civic Center represents the commercial core/strip of the City. Commercial uses include retail and service space and commercial recreation.

Commercial retail and service uses include strip development containing retail, restaurant, service shops and offices along major traffic corridors with off-street parking, as well as retail centers which are non-strip development with contiguous interconnected off-street parking. These retail centers typically contain one magnet store, usually a supermarket. Commercial retail and service uses also include office uses as well as hotels and motels.

The commercial retail uses in Malibu are located primarily along the Pacific Coast Highway just east of the Civic Center, in the Civic Center and surrounding area, as well as Point Dume. There are scattered pockets of a few stand-alone commercial uses along both the north and south sides of Pacific Coast Highway throughout the City, such as that found at Trancas Canyon Road.

Office uses include low and medium rise professional office buildings such as, business, medical, dental, law, and public offices. The majority of office development is located in the Civic Center with a few office buildings located at Point Dume. Commercial retail and service uses account for about 145 acres of land and 78 percent of all commercial uses.

There are five motels and one hotel within the City. These land uses are identified as visitor-serving uses by the Coastal Commission and contribute to the satisfaction of required facilities for the Local Coastal Program. Two of the motels, the Malibu Country Inn and the Malibu Riviera Motel are located in the Point Dume/Paradise Cove area. The other three motels, the Casa Malibu Motel, the Malibu Shores Motel and the Malibu Surfer Motel, and the Malibu Beach Inn Hotel are located within the commercial core of the City, just east of the Civic Center area. All are relatively small, ranging in size from 13 to 47 rooms. Collectively, the hotels and motels offer 151 rooms.

There are two commercial recreational uses located within the City. The first, the Malibu Racquet Club is located just west of City Hall, and the second site, the Malibu Riding and Tennis Club is located in the western end of the City.

Research and Development - The research and development use in the City is the Hughes Research Lab which is located on Malibu Canyon Road and accounts for less than 18 acres.

Public and Semi-Public Facilities - Public facilities which include government offices, sheriff stations, fire stations, religious facilities, libraries, community centers, as well as educational facilities account for about one percent of all land uses within the City. These land uses are scattered throughout Malibu. There is a government center, sheriff station, public library, medical offices and the Webster Elementary School located in the Civic Center area. The Malibu Middle/High School and Juan Cabrillo Elementary School are located in West Malibu in the Malibu Park area. Located in Point Dume is the Pt. Dume Community Center, which is owned by the Santa Monica-Malibu Unified School District. There are four fire stations located throughout the City. Religious facilities such as churches and synagogues are also located throughout the City.

Semi-public facilities include light industrial uses such as open storage, utility facilities, water storage facilities, and maintenance yards that are owned by State, county and municipal governments.

Agricultural - Traditional farming and ranching is practiced in only a minute fraction of land within the City. Horticulture and horse ranches are more prevalent, usually as a transitional use or an adjunct to residential uses. Residents view preservation of these uses as important to the preservation of the rural atmosphere of the community.

Horticulture - The horticulture land use category includes both retail and wholesale commercial agricultural properties of the types normally found in Malibu. Horticultural land can be used for irrigated and non-irrigated cropland, such as avocado and herb fields, and improved pasture land for horses; orchards, vineyards, and nurseries; and other agriculture. Horticultural uses account for only 0.2 percent of all land use in the City, or 24.8 acres. While none of these areas are of state-wide importance, there

are some areas of prime soils which are described more fully in the Conservation Element. These soils and the climate may combine to make some of these properties unique for horticultural purposes.

The croplands include cultivated, in crop, harvested, fallow, or temporarily idle land. The improved pasture land may be in pasture year-round or in the cropland seasonal rotation. There are three sites of this land use type located within the City. One site is located east of Kanan Dume Road between the City limits and Pacific Coast Highway, a second site is located north of Zuma Beach and Malibu Park, just south of the City limits, and the third site is located north of the Civic Center along the City boundary.

Orchards, vineyards, and nurseries represent the greatest majority of horticultural land uses. Orchards and vineyards are typically commercially productive tree, bush, and vine crops such as fruit and nut trees and bush crops. Nurseries include land managed for the production of ornamental trees, plants and flowers, vegetable seedlings, seed farms, sod farms, and wholesale greenhouses. These uses are scattered throughout the City and found typically on the north side of Pacific Coast Highway and on Point Dume. Many small plots have been developed on vacant residential lots and are devoted to such things as herbs and avocados. There are two nurseries located west of Trancas Canyon, two orchards located north of Point Dume, one nursery located just west of Pepperdine, and two nurseries and two orchards located in the Civic Center area.

No dairies, livestock, or poultry operations exist in Malibu. Other miscellaneous horticulture includes storage facilities, compost piles, hydroponic farms, fish hatcheries, and apiaries. The category also includes, backyard lots of mixed agricultural/non-agricultural uses. One of these sites is located north of Pacific Coast Highway, east of the Point Dume area, and another site is located north of the Civic Center on the City boundary.

Horse Ranches - Horse ranches are not specified on the existing land use map because in Malibu they include both commercial and non-commercial ranches, stables, tracks, barns and corral areas which have differing implications for planning. This land use falls under both residential and commercial. There are at least 38.7 acres of horse ranches in Malibu which account for at least 0.3 percent of total land in the City. The Los Angeles County existing land use data identify four horse ranches or such areas in the City. They are located in the hills above the Civic Center, the hills north of Paradise Cove, north of Pacific Coast Highway at the west end of Zuma Beach and north of Pacific Coast Highway between Decker Canyon and the western boundary of the City.

Public Open Space - Open space accounts for 14.9 percent of the total land in Malibu, making it the third most prevalent type of land use in Malibu. There are 1,869.9 acres of open space including regional and local parks, beach parks, and public open space used for recreation.

Local and regional parks make up 17.2 acres of the open space in Malibu. There is one local park in Malibu as defined by the Aerial Information Systems. Local parks are typically community parks or sports fields and their associated parking. Beach parks are not included in this designation. The 6.5 acre Malibu Community Center located on Point Dume is considered the only neighborhood park.

There are two regional parks in Malibu as defined by the Aerial Information Systems. Malibu Bluffs Park located at the mouth of Malibu Canyon which is approximately 8.7 acres and provides playing fields and the Michael Landon Community Center. The second regional park in Malibu is the Malibu Lagoon State Beach. The park is approximately 3.5 acres located just east of the Civic Center at the mouth of Malibu Creek. The Malibu Bluffs Park is heavily used by local residents, so is also considered a community park for recreation planning purposes. In addition, a portion of Charmlee Natural Area is also located within the City.

Beach parks and public open space used for recreation totaling 201 acres account for a large portion of the open space in Malibu. The most dominant land use in this category are the beach parks which are located throughout the City, along the coast.

Undeveloped Land - The land in Malibu is predominantly undeveloped. There are almost 7,296.5 acres of undeveloped land that account for about 58.1 percent of the total land within the City. Most of the undeveloped land in Malibu is in a natural state, containing tree, brush, shrub, or grassland vegetation. Undeveloped land includes: park land; environmentally sensitive lands, beaches, undeveloped land which may be suitable for development, abandoned agricultural land with limited improvements.

Beach areas include coastal beach areas which are not associated with a national, state, county, or a municipal beach park. In Malibu these beaches are typically private beaches. They are located along the coast extending from the east end of the City (Las Tunas Beach) to the western boundary of the City including the Las Flores, Big Rock, Carbon, La Costa and Big Rock Beach areas, Malibu Colony, Point Dume, Broad Beach, LeChuzza Beach and the Encinal beaches.

1.2.2 Land Use Trends

According to the 1990 Census, it is estimated that there are currently a total of 5,621 residential units in the City.² Census statistics indicate that from 1980 to 1990 there

² The surveys for the 1990 Census were conducted prior to Malibu's incorporation, and therefore the existing census tracts cover areas far greater than the City boundaries. To obtain estimates of the number of dwelling units and population, the County of Los Angeles Department of Regional Planning overlaid the city boundary upon the 1990 Census tract and block boundaries. Block level data was used to isolate housing counts between the City and unincorporated areas because the City lies within portions of four census tracts. Where the blocks were split by city boundaries, department staff field counted housing units within the portion of the block located within the City.

The following is the housing and population breakdown between the City of Malibu and the unincorporated areas for April 1, 1990. It assumes that the adopted city boundaries were in place as of April 1, 1990. In this way, census data may be used

was a slight increase in the development of multi-family dwelling units. This was accompanied by an increase in single family dwelling units as well.

The population increased between 1980 and 1990 from 10,172 in 1980 to 11,116 in 1990, an increase of 9.3 percent.

These demographic trends indicate a pressure for continued growth. The Southern California Association of Governments (SCAG), the regional planning agency for the six-county region, prepares population forecasts for the region, including individual cities. The SCAG projections for the City of Malibu are as follows:

	Population	Households	Dwelling Units	Employment
1990	11,643	4,874 (2.02/household)	5,851	7,665
2000	12,063	5,100 (2.01/household)	6,010	7,865
2010	14,254	5,300 (2.29/household)	6,220	8,065

Development constraints in Malibu may, however, prohibit significant future growth. Constraints are fully described in the Background Reports to the remaining Elements and addressed, as appropriate, in those Elements. Soon after incorporation, the City enacted a moratorium on all development with exceptions applying to single family units. The moratorium expired on March 28, 1993.

1.3 Proposed Land Uses (Land Use Policy Map)

Table 1-2 and Figures LU-2A to LU-2E tabulate and display the planned land uses and the distribution of those land uses within the City. Table 1-2 provides

an estimate of the number of units which could ultimately exist in Malibu if all areas could be developed in accordance with the land use designations without consideration to site specific topography, geologic, or environmental constraints.

to provide a baseline for all subsequent estimates for the City. The division between the City and the unincorporated areas was conducted by the Los Angeles County Department of Regional Planning, Population Research Section.

HOUSING

Census Tract	City	Unincorporated	Total	Percentage
8004.01	408	287	695	58.7%
8004.02	3,336	303	3,639	91.7%
8005.01	754	981	1,735	43.5%
8005.02	1,123	351	1,474	76.2%
Total	5,621	1,922	7,543	74.5%

POPULATION

Census Tract	City	Unincorporated	Total	Percentage
8004.01	597	2,201	2,798	21.3%
8004.02	7,125	1,000	8,125	87.7%
8005.01	1,410	2,245	3,655	38.6%
8005.02	1,984	807	2,791	71.1%
Total	11,116	6,253	17,369	64.0%

With regard to residential buildout, which accounts for the vast majority of the land in the City, it also estimates potential buildout based on vacant acreage, taking into account both the general topography of the City and the existing land use designations which limit potential subdivision.

The buildout figures for residential and commercial development represent the maximum theoretical buildout that would be permitted under the land use densities and intensities established in this plan. For several reasons, however, these figures do not reflect the actual level of buildout that the City projects will occur during the lifetime of this plan. Accordingly, these buildout figures are not reliable predictions and are not regarded as a regulatory tool.

First, environmental constraints will limit the ultimate buildout of both residential and commercial development in the City. For example, the City's slope density formula will reduce the potential for subdivision and development of larger parcels in the City. Furthermore, steep slopes and other geologic hazards in many cases will limit commercial development to the lower intensities permitted under the floor area ratio applicable to commercially zoned land.

Second, the buildout figures are based on the number of acres of vacant land in the City rather than the number of legal lots. Many of these acres cannot be developed because they are part of legal parcels; although they are larger than the legal minimum, they are not large enough to subdivide.

Finally, there are practical impediments to development of many areas of the City, such as natural constraints and the cost of infrastructure. For example, more than 50% of the vacant, residentially designated land in Malibu is of a slope greater than 35% and not suitable for development.

All of these factors will operate to limit both the rate and amount of growth that is expected to occur in the City during the lifetime of the plan. However, it is impossible to definitively assess the actual amount and timing of development that will occur in Malibu as implementation of the plan progresses. As a result, the buildout calculation represents a worst case scenario for environmental review and planning. For the purpose of assuring that the City meets its legal obligations under State housing law, the City has accounted for the growth projections prepared by SCAG in order to accommodate the reasonably expected growth that will create housing demands. The plan is also designed to limit growth to protect natural resources, avoid overburdening infrastructure that cannot be feasibly improved, and to maintain the rural residential character of the community.

Furthermore, to ensure that pace of development in the City does not significantly increase over historic levels, the City will establish a development monitoring program that will allow the city to monitor development and take appropriate steps to regulate the rate of growth in the event that it exceeds levels established by the City.

The Land Use Policy Map (Figure LU-2A to 2E) developed for Malibu identifies 20 land use classifications including ten residential land use categories, five commercial land use categories, and categories for publicly owned land, research and development, agriculture and horticulture, private recreational facilities, and Specific Plan Districts. These categories, their total acreage throughout the City and, for residential areas, the corresponding allowable dwelling unit buildout totals are included in the table below and fully described in the Goals, Objectives, Policies, and Implementation Measures. As previously noted, where property is already subdivided into legal lots, actual densities may be higher than indicated on the table.

The data for the existing land use map (Exhibit LU-1A-1D) was developed using 1990 aerial photographs and a computer mapping program. Due to the use of aerial photographs without regard to existing parcel lines a large margin of error can be expected. Much of the land shown as vacant is the undevelopable portion (canyons and steep slopes) of existing subdivided lots. These maps were used to estimate the number of acres of vacant land available for residential development (Table 1-2) and as such the buildout numbers are greatly exaggerated.

The Draft Land Use Policy Map, accepted by the City Council based on recommendations from the City's General Plan Task Force (GPTF) and substantial public input from July 1994 through April 1995, is based on existing land uses in the City (as depicted on previous Figure 1-1), and an analysis of existing conditions and constraints. The constraints considered by the City Council and the GPTF included, but were not limited to: (a) watersheds in the City and the associated analysis of these watershed contained in the wastewater study conducted for the City by Dr. Peter Warshall (as depicted in Figure CO-2 of this General Plan); (b) environmentally sensitive areas (as depicted in Figure CO-3 in the Conservation Element of this General Plan); (c) marine resources (see Figure CO-4); (d) scenic resources (see Figure CO-5); (e) recreation facilities (see Figure OS-1 of this General Plan); (f) geologic conditions in the City (as depicted in Figures S-1 to S-10 of the Safety Element of this General Plan); (g) flooding in the City (as depicted in Figure S-11 of the Safety Element); (h) brush fire history (as depicted in Figure S-16 of the Safety Element); and (i) other background material, text and maps presented to the GPTF during the course of the preparation of the Plan.

The Land Use Policy Map for Malibu also requires the establishment of eight classification overlays reflecting existing historical and natural resource, and development constraint overlay classifications. These overlays denote historically, geologically and environmentally sensitive areas, environmental buffer areas, sloped areas, and flood and fire hazard areas. Development of properties in the areas covered by overlays will require additional study prior to development. The overlay areas are identified and described in this Element as part of Goals, Objectives, Policies, and Implementation Policies. The background material used to develop these overlays may be found in the Safety and Conservation Elements and their Background Reports.

Additional objectives which will be achieved through this element will include:

- Promotion of a balanced and functional mix of land uses consistent with community values, neighborhood characteristics, the vision for the future of the City and sound planning techniques;
- Guidance for public and private investment; and
- Reflection of the opportunities and constraints affecting land use identified in the other elements of the general plan.

**Table 1-2:
Land Use Plan Yield at Maximum Buildout**

Land Use Designation	Number			
	Approx. Vacant Acres	Total Acres	Theoretical Potential Units ¹	Potential Units ² (adjusted for slope and redevelopment)
1. Single Family Medium (SFM) 2 to 4 dwelling units per acre	143	493	493 - 1,972	120 - 244
2. Single Family Low (SFL) 1 to 2 dwelling units per acre	110	280	140 - 560	47 - 94
3. Rural Residential 1 (RR1) 1 dwelling unit per acre	254	1,184	592 - 1,184	108
4. Rural Residential 2 (RR2) 1 dwelling unit per 2 acres	1,733	1,928	482 - 964	368
5. Rural Residential 5 (RR5) 1 dwelling unit per 5 acres	1,414	1,609	161 - 322	120
6. Rural Residential 10 (RR10) 1 dwelling unit per 10 acres	368	642	32 - 64	15
7. Rural Residential 20 (RR20) 1 dwelling unit per 20 acres	1,820	2,766	69 - 138	39
8. Beach-Front Multi-family (MFBF)	1	13	97	15
9. Multi-family (MF)	12	138	1,331	72
10. Mobile Home (MH)	0	108	649	0
TOTAL RESIDENTIAL USES	5,855	9,161	4,146 - 7,381	904 - 1,075

¹Number of units that could be built if Malibu were perfectly flat, free from any environmental constraints, and entirely undeveloped.

²Number of units theoretically possible given the average gradient for the City and the average existing parcel size in proportion to the minimum required parcel size for the land use designation. According to the Opportunities and Constraints Report for the Safety Element (May 1993) and based on topographical maps of the City, more than 50% of the vacant, residentially designated land in Malibu is of a slope greater than 30%. Thus, at least 50% of the total acreage is unsuitable for development. Further, many acres of land cannot be developed because they are part of legal parcels, though larger than the minimum required, not large enough to subdivide. A conservative estimate is that 15% of the total acreage in the City falls in this category. Thus, the potential number of units adjusted for slope and redevelopment can be estimated using this formula [(total vacant acres - 50% for slope) - 15% for non-subdividable acreage] x maximum allowable density = maximum potential number of units.

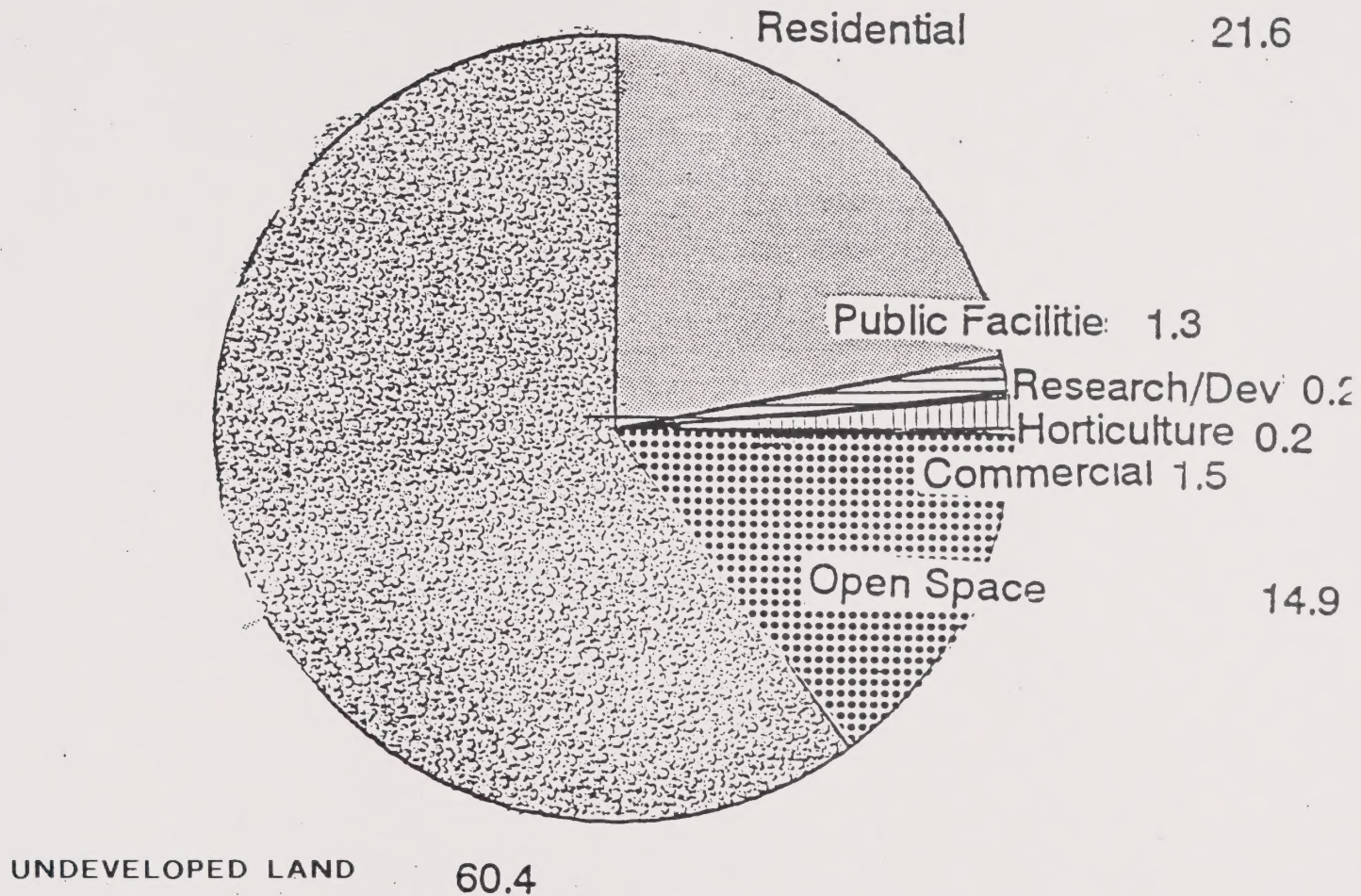
³Buildout of the MFBF is based on 2,830 sq. ft. per lot.

⁴787 dwelling units including: 364 single family units; 188 duplexes; 144 triplexes; 32 fourplexes; and 59 condominiums or apartment units.

**Table 1-2:
Land Use Plan Yield at Maximum Buildout**

Land Use Designation	Acres	Sq. Feet
11. Community Commercial (CC) (FAR = 0.15 to 0.20:1.00)	156	1,010,040 - 1,354,715
12. Commercial General (CG) (FAR = 0.20 to 0.25:1.00)	100	874,685 - 1,093,355
13. Commercial Neighborhood (CN) (FAR = 0.15:1.00)	65	425,365
14. Commercial Visitor (CV) (FAR = 0.15 to 0.25:1.00)	42	361,550 - 451,935
15. Business Professional Office (FAR = 0.15:1.00)	7	43,125
TOTAL COMMERCIAL USES ⁵	370	2,714,756 - 3,368,495
16. Open Space	1,878	N/A
17. Institutional/Publicly Owned Land	214	N/A
18. Industrial/Research and Development	70	N/A
19. Agriculture-Horticulture	2	N/A
20. Private Recreational Facilities (PRF)	13	N/A
21. Recreational Vehicle Park (RVP)	25	N/A
TOTAL OTHER LAND USES	2,202	----
SUBTOTAL ALL LAND USES	11,733	----
Public/Private Roads	819	----
TOTAL ALL LAND USES	12,552	----

⁵Includes specific plan districts.



CITY OF MALIBU GENERAL PLAN

Figure LU-2
Distribution of Existing Land Uses

272

1971-1974



804

PROPOSED LAND

CITY OF MALIBU GENERAL PLAN

Figure 1.1
Distribution of Existing Land Uses

Insert
Figure LU-2(A)

Page 102
10/24/2017

Insert
Figure LU-2(B)

1000
1000

Insert
Figure LU-2(C)

**Insert
Figure LU-2(D)**

Page 1
Page 2

1. The following information is provided for the purpose of the study.

2. The following information is provided for the purpose of the study.

3. The following information is provided for the purpose of the study.

4. The following information is provided for the purpose of the study.

5. The following information is provided for the purpose of the study.

6. The following information is provided for the purpose of the study.

7. The following information is provided for the purpose of the study.

8. The following information is provided for the purpose of the study.

9. The following information is provided for the purpose of the study.

10. The following information is provided for the purpose of the study.

11. The following information is provided for the purpose of the study.

12. The following information is provided for the purpose of the study.

100-100
100-100

1.4 Goals, Objectives, Policies and Implementation Measures

LU GOAL 1: THE NATURAL AND ENVIRONMENTAL RESOURCES OF MALIBU ARE PROTECTED AND ENHANCED.

LU OBJECTIVE 1.1: Development that does not degrade the environment.

LU Policy 1.1.1: The City shall protect the natural environment by regulating design and permitting only land uses compatible with the natural environment.

LU Policy 1.1.2: The City shall ensure that land uses avoid or minimize adverse impacts on water quality and other natural resources, such as undisturbed watershed and riparian areas.

LU Policy 1.1.3: The City shall control surface runoff into coastal waters, wetlands, and riparian areas.

LU Policy 1.1.4: The City shall preserve the City's rural residential character.

LU Policy 1.1.5: The City shall require careful site planning which blends development with the natural topography.

To implement these policies the City shall:

LU Implementation Measure 1: Identify impacts of proposed development on the sensitive environmental resources within Malibu (Table 3-5) and impose all feasible mitigation measures as conditions of development.

LU Implementation Measure 2: Monitor the cumulative impacts of development on sensitive environmental resources and develop environmental protection guidelines to regulate development and avoid destruction or depletion of the resources.

LU Implementation Measure 3: Regulate grading and excavation to minimize impacts of construction on water quality and natural resources. These regulations shall require the use of best management practices (BMP's) to control erosion and manage storm water. These BMP's may include the use of seasonal and mandatory year round control measures such as tarps, sandbag dams, on site retention of first flush rain, temporary drainage courses and erosion control measures, de-silting pounds, sediment traps, filter fencing,

bag dams, on site retention of first flush rain, temporary drainage courses and erosion control measures, de-silting pounds, sediment traps, filter fencing, straw bales and catch basin filtration.

LU Implementation Measure 4: Minimize the deleterious effects of runoff by limiting impermeable lot coverage to no more than 45% of lot for lots 1/4 acre or smaller, 35% for lots between 1/4 and 1/2 acre, and 30% for lots greater than 1/2 acre. The maximum impermeable lot coverage shall be 25,000 square feet. Pools and spas shall not be included within the calculation for the amount of impermeable lot coverage. These limits shall not apply to beach front lots.

LU Implementation Measure 5: Evaluate any increase in peak flow rate from surface runoff for proposed development and mitigate any adverse impacts to property or the environment. Require a drainage control system, including on-site retention or detention where appropriate for all new development. Storm runoff control systems shall be designed to ensure that the maximum rate of storm water runoff does not exceed peak level that existed prior to development.

LU Implementation Measure 6: Prohibit grading during the raining season (from November 1 to March 31) in areas which might negatively impact Resource Protection Areas (RPAs) unless a delay in grading until after the rainy season is determined to be more environmentally damaging. Where grading is permitted during the rainy season, sediment basins (including debris basins, desilting basins, or silt traps) shall be required on the project site prior to or concurrent with the initial grading operations and maintained through the development process.

LU Implementation Measure 7: Require cut and fill slopes to be stabilized with planting at the completion of final grading. In RPAs, planting on cut and fill slopes shall be of native plant species using accepted planting procedures, consistent with fire safety requirements. Such planting should be adequate to provide 50% permanent coverage within 365 days and full coverage within 3 years. Planting shall be repeated if necessary to provide such coverage. This requirement should apply to all disturbed soils. Jute netting or other stabilization techniques may be used as necessary as temporary methods.

LU Implementation Measure 8: Require that development not interfere with public and private views and view corridors to the greatest extent feasible.

LU Implementation Measure 9: Locate development to minimize vegetation clearance, consequent soil erosion, and adverse impacts on wildlife and visual resources by clustering development near existing roads on areas of relatively gentle slopes, as far as feasible outside of riparian areas in canyons, and outside areas which serve as primary wildlife corridors.

LU OBJECTIVE 1.2: Preserve and protect Resource Protection Areas.

LU Policy 1.2.1: The City shall prohibit development in Environmentally Sensitive Habitat Areas (ESHA) unless no feasible alternative is available.

LU Policy 1.2.2: The City shall require development in and adjacent to Resource Protection Areas (RPA) to be designed to mitigate environmental impacts to the fullest extent feasible.

LU Policy 1.2.3: The City shall require any proposed new public access to and through ESHAs to be consistent with the natural resources of the area.

To implement these policies the City shall:

LU Implementation Measure 10: Keep a current database (inventories and/or maps) of RPAs, including ESHAs, significant watersheds, wildlife habitat linkages, disturbed sensitive resource areas, blue line streams and significant oak woodlands; consult the database when evaluating any proposed development.

LU Implementation Measure 11: Require all proposed development in or adjacent to ESHAs be reviewed by the City Biologist or equivalent professional.

LU Implementation Measure 12: Where proposed development lies within an ESHA because no feasible alternative site exists, in addition to review of other potentially significant environmental impacts require applicants to conduct studies of biological resources to determine potential adverse environmental impacts of proposed development and impose all feasible mitigation measures.

LU Implementation Measure 13: Site and design development in areas adjacent to ESHAs and public parks to avoid impacts which might degrade those areas and to be compatible with the continuation of the existing habitat areas.

LU Implementation Measure 14: Maintain natural vegetation buffer areas that protect sensitive riparian habitats by requiring development other than driveways and walkways to be set back at least 100 feet from outer limits of sensitive riparian habitats, where feasible.

LU Implementation Measure 15: Require environmentally sensitive walkways, board-walks, parking, trash receptacles and restrooms where necessary and appropriate to access public parklands.

LU Implementation Measure 16: Develop programs to purchase conservation easements, accept donations of land or conservation easements, use transfer of development rights, develop impact mitigation fees, encourage formation of a local open space district, explore inter-governmental agreements, and seek funding from state and federal agencies for open space and natural resources protection.

LU OBJECTIVE 1.3: Land uses consistent with flood, geologic and fire safety requirements.

LU Policy 1.3.1: The City shall regulate development in floodways.

LU Policy 1.3.2: The City shall require proposed development to avoid geologic safety hazards created by development.

LU Policy 1.3.3: The City shall require fire protection measures for development.

To implement these policies the City shall:

LU Implementation Measure 17: Implement the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) program in Flood Hazard Overlay Areas.

LU Implementation Measure 18: Amend the Building Code to regulate development to respond to local conditions that require special consideration, such as impacts of septic systems on ancient and active landslides, unusual drainage problems, fire hazards and similar conditions.

LU Implementation Measure 19: Develop a system of incremental and progressive reviews of known or suspected geologic and liquefaction hazards in connection with development applications so that review is proportionate to the risk of such hazards.

LU Implementation Measure 20: Require study of potential soil creep, settling, mass movement and their attendant hazards as part of geologic review for proposed development in areas where appropriate due to known or suspected hazards.

LU Implementation Measure 21: Require applicants to execute release and assumption of risk from flood, geologic and fire hazards where appropriate.

LU Implementation Measure 22: Implement regulations, such as those of the Los Angeles County Consolidated Fire Protection District, to minimize the risk of loss of life and property as a result of fire.

LU Implementation Measure 23: In consultation with the appropriate park agency, all development within 200 feet of public park lands, require a fire vegetation clearance prescription analysis and require appropriate landscaping or vegetation clearance as a condition for development.

LU OBJECTIVE 1.4: Development consistent with the preservation of the natural topography and viewshed protection.

LU Policy 1.4.1: The City shall preserve significant ridgelines and other significant topographic features (such as canyons, knolls, hills and promontories).

LU Policy 1.4.2: The City shall minimize the visual impact of hillside development.

LU Policy 1.4.3: The City shall minimize the alteration of existing land forms and require design consistent with natural topography and processes of the site (i.e. geological, soils, hydrological, water percolation and runoff).

LU Policy 1.4.4: The City shall require development to protect significant natural drainage courses and, where safety considerations necessitate modification, require that projects provide a natural appearance.

LU Policy 1.4.5: The City shall require hillside management review of all hillside development prior to project approval.

To implement these policies the City shall:

LU Implementation Measure 24: Map significant ridgelines and other significant topographic features.

LU Implementation Measure 25: Develop a hillside management ordinance for residential and commercial lots that (a) regulates grading and the use of retaining walls to preserve natural topography, (b) establishes a slope density formula that reduces the effective lot area of lots with an average slope greater than 10% by a factor of 1.1 for 10.1-15% average slope, 1.3 for 15.1-20% average slope, 1.5 for 20.1-25% average slope, 1.7 for 25.1-33% average slope and 1.95 for slopes over 33%, (c) precludes development on slopes greater than 40% (d) protects significant ridgelines, hilltops and promontories by requiring appropriate setbacks, (e) facilitates reclamation and enhancement of visually degraded areas, (f) minimizes raw cut slopes, and (g) locates development so that structures blend in with the hillside and do not exacerbate existing hazards.

LU Implementation Measure 26: Locate development as close as feasible to existing roadways, services, and existing development to minimize the effects on sensitive environmental resources and surrounding RPAs. However, protection of ridgelines and public ocean and ridgeline views shall have priority over any increase in grading required by this policy.

LU Implementation Measure 27: Site and design development to protect public views from scenic roadways to and along the shoreline and to scenic coastal areas, including public parklands.

LU Implementation Measure 28: Require setbacks from blue line streams to protect natural drainage systems.

LU Implementation Measure 29: Design stream road crossings using the least environmentally damaging method. Road crossings of streams shall be accomplished by bridging, unless other methods are determined to be less damaging. Bridge columns shall be located outside stream courses if feasible.

LU OBJECTIVE 1.5: Integrated environmental review.

LU Policy 1.5.1: The City shall scrutinize proposed development for any potential individual or cumulative adverse environmental impact, in addition to those impacts that are peculiar to development otherwise consistent with the General Plan.

LU Policy 1.5.2: The City shall reevaluate every five years the cumulative impacts predicted by general plan buildout and the effectiveness of mitigation measures imposed to implement the Plan.

To implement these policies the City shall:

LU Implementation Measure 30: Maintain an Environmental Review Board (ERB) comprised of qualified professionals with technical expertise in resource management as a technical advisory committee. The ERB shall review and make recommendations on proposed development in or adjacent to an ESHA and development that may have a potential adverse environmental impact or which impose special environmental problems.

LU Implementation Measure 31: Identify and evaluate individual, cumulative and secondary adverse environmental impacts of proposed development.

LU Implementation Measure 32: Develop local California Environmental Quality Act (CEQA) and ERB guidelines, to assure comprehensive and timely environmental analysis setting forth procedures to determine whether proposed development may have potential significant adverse environmental impacts.

LU Implementation Measure 33: Establish criteria for minimum qualifications of independent consultants and specialists.

LU GOAL 2: MANAGE GROWTH TO PRESERVE A RURAL COMMUNITY CHARACTER.

LU Policy 2.1.2: The City shall seek public input about proposed development and value the democratic participation of all citizens.

LU Policy 2.1.3: The City shall proportion commercially zoned properties based on community need.

LU Policy 2.1.4: The City shall require development to be landscaped so that the project blends in with the environment and neighborhood.

LU Policy 2.1.5: Consistent with the primary objective of protecting RPAs, the City shall protect and preserve public and private ocean and mountain views, by striking an equitable balance between the right to reasonable use of one's property including the maintenance of privacy and the right to protection against unreasonable loss of views.

LU Policy 2.1.6: The City shall encourage pedestrian friendly design in concentrated commercial areas.

LU Policy 2.1.7: In the event that current building permit activity for new residential or commercial structures (not remodels) pursuant to this Plan exceeds the historic growth rate for such uses, the City shall develop and implement a permit allocation system to manage the orderly development of the City in accordance with the historic growth rate. The City shall develop and adopt standards to determine when the permit allocation system shall be implemented, based upon historic growth trends and Plan buildout data. Calculation of these standards shall exclude permits for structures rebuilt due to disaster, any periods in which the City's development moratorium was in effect, and County-issued permits during the incorporation process (December 1987 - March 1991).

To implement these policies the City shall:

LU Implementation Measure 34: Prior to any required public hearing, require proponents to inform all interested persons about proposed development applications through the use of (a) site signs, (b) direct mail notification to

affected residents, landowners and any person or group requesting notification and (c) neighborhood meetings.

LU Implementation Measure 35: Require commercial development to be designed with a residential scale compatible with the surrounding residential neighborhoods.

LU Implementation Measure 36: Permit creative styling of structures to encourage a limited number of visual landmarks in areas that would not distract from the natural scenery.

LU Implementation Measure 37: Permit walkways and pedestrian paths made of natural materials to be used as part of commercial developments required open space.

LU Implementation Measure 38: Regulate on-premise signs so that they are coordinated with the environment and do not detract from the scenery.

LU Implementation Measure 39: Adopt landscaping requirements and where feasible and excluding private garden areas favor use of native plants.

LU Implementation Measure 40: Develop a master landscape plan for PCH and entryways to individual neighborhoods to provide visual continuity and enhance community identity.

LU Implementation Measure 41: Adopt a view protection ordinance that defines a primary view which shall be protected against proposed development including new vegetation wherever it is possible to do that without creating other significant adverse environmental impacts or unreasonably restricting the property owner's use of his/her property.

LU Implementation Measure 42: Require an applicant for proposed development on a beach front lot which development is either seaward of an existing structure or on a vacant lot to submit along with an application for development, a written determination from the State Lands Commission whether the development would encroach on to state tidelands and, if so, whether the State Lands Commission has approved such encroachment.

LU OBJECTIVE 2.2: Development consistent with the efficient operation of the traffic system and service infrastructure with adequate capacity to serve all residents.

- LU Policy 2.2.1:** The City shall require adequate infrastructure, including but not limited to roads, water, and wastewater disposal capacity, as a condition of proposed development.
- LU Policy 2.2.2:** The City shall maintain the City's fiscal integrity and ensure that revenues and fees generated by new development are sufficient to offset associated City costs.
- LU Policy 2.2.3:** The City shall only permit development which is consistent with the capital improvement plan and economic health of the City.
- LU Policy 2.2.4:** The City shall manage development in accordance with the efficient operation of the traffic system and service infrastructure.
- LU Policy 2.2.5:** The City shall evaluate effect on road capacity of traffic impacts from all sources when determining the type and intensity of land use.
- LU Policy 2.2.6:** The City shall coordinate with utility providers to underground all utility transmission lines and pipes when and where feasible, unless above-ground location is required for geotechnic or hydrologic safety.
- LU Policy 2.2.7:** The City shall implement the recommendations of the 1992 Malibu Wastewater Management Study or equivalent program.
- LU Policy 2.2.8:** The City shall require adequate wastewater management for development.

To implement these policies the City shall:

LU Implementation Measure 43: Prior to approval of a specific plan, subdivision map, lot split, or other development project, require applicant to demonstrate by substantial evidence that the holding capacity of the area and infrastructure are sufficient to sustain the uses and intensity of development proposed by the applicant.

LU Implementation Measure 44: Require fiscal/service impact analyses for proposed development. Where anticipated costs of services exceed projected revenues and fees, require development to use appropriate financing mechanisms to defray the anticipated costs of municipal services.

LU Implementation Measure 45: Adopt an wastewater treatment ordinance which appropriately and safely regulates wastewater management through on-site systems or small volume neighborhood collection systems in accordance with the City's development pattern consistent with the 1992 Wastewater Management Study. This program may include the use of state of the art technologies to eliminate pathogens from wastewater prior to release into the environment.

LU Implementation Measure 46: Adopt greywater ordinance which appropriately and safely encourages and regulates use of greywater systems.

LU Implementation Measure 47: Disseminate information to the community regarding options for wastewater management and use of greywater systems, including site evaluation criteria and standards for installation and maintenance of on-site septic systems.

LU Implementation Measure 48: Establish water retention/detention standards.

LU Implementation Measure 49: Coordinate with utility providers to implement the Public Utility Commission's Rule 20A Underground Utility Program.

LU Implementation Measure 50: Require development to underground utilities where the cost does not exceed 10% of the total project cost.

LU OBJECTIVE 2.3: Development of appropriate scale and context.

LU Policy 2.3.1: The City shall protect and preserve the unique character of Malibu's many distinct neighborhoods.

LU Policy 2.3.2: The City shall discourage "mansionization" by establishing limits on height, bulk, and square footage for all new and remodel single family residences.

To implement these policies the City shall:

LU Implementation Measure 51: Adopt community design standards that recognize Pacific Coast Highway (PCH) as a residential corridor with centers at Las Flores, Civic Center, Point Dume and Trancas. Each center should have its own character, identity and scale with landscaping along PCH having an overall unifying theme.

LU Implementation Measure 52: Develop checklist of development standards to assist staff and applicants in reviewing development permits.

LU Implementation Measure 53: Permit individual neighborhoods to propose custom development standards. Adopt appropriate neighborhood standards.

LU Implementation Measure 54: Develop community design standards for multi-family residential buildings with community input.

LU Implementation Measure 55: Establish an administrative procedure and guidelines to interpret and balance specific standards in the General Plan where uniform application of the standards appears to produce an outcome inconsistent with the intended purpose of the standard or may defeat another policy of the General Plan. This measure shall be applied in a manner to achieve the most environmentally protective result feasible.

LU OBJECTIVE 2.4: Rural residential neighborhoods in Western Malibu.

LU Policy 2.4.1: The City shall preserve and protect vistas and large open areas that contribute to the rural feeling of the area.

LU Policy 2.4.2: The City shall limit nonresidential uses to those compatible with the rural residential character of the surrounding neighborhoods.

LU Policy 2.4.3: The City shall maintain large lots and encourage residential and compatible agricultural uses.

LU Policy 2.4.4: The City shall encourage the provision of open space areas suitable for horses and other farm animals where consistent with resource protection policies.

LU Policy 2.4.5: The City shall promote a system of equestrian and pedestrian trails.

LU Policy 2.4.6: The City shall avoid improvements which create a suburban atmosphere such as sidewalks and street lights.

To implement these policies the City shall:

LU Implementation Measure 56: Cluster accessory structures to preserve open space.

LU Implementation Measure 57: Develop a master plan of trails as detailed in the Open Space Element.

LU Implementation Measure 58: Cooperate with the National Park Service to promote an integrated system of trails throughout the Santa Monica Mountains National Recreation Area.

LU Implementation Measure 59: Distinguish rural residential neighborhoods for purposes of infrastructure design standards, including conforming Building Code and public works standards to preserve the rural atmosphere.

LU GOAL 3: RECREATIONAL OPPORTUNITIES CONSISTENT WITH PROTECTION OF THE NATURAL RESOURCES AND RESIDENTIAL CHARACTER OF MALIBU.

LU OBJECTIVE 3.1: Passive recreational opportunities compatible with fragile natural resources.

LU Policy 3.1.1: The City shall ensure visitor serving and recreational uses are compatible with the natural resources and aesthetic values of the area.

LU Policy 3.1.2: The City shall encourage appropriate passive uses of parks and beaches such as biking, bird watching, hiking, horseback riding, kayaking, scientific study, surfing, swimming and tide pool viewing.

LU Policy 3.1.3: The City shall prohibit development on public beaches other than that necessary to protect public health, safety and welfare or to provide small scale beach related commercial uses.

To implement these policies the City shall:

LU Implementation Measure 60: Minimize destruction of natural areas and, where possible, prohibit transformation of natural areas to commercial ones by limiting development to that which is necessary for public access and safety.

LU Implementation Measure 61: Prohibit camping, except in designated areas.

LU Implementation Measure 62: Work with public agencies and private recreational clubs and groups to promote use of parks and beaches for passive recreation.

LU OBJECTIVE 3.2: Visitor-serving recreational opportunities consistent with the residential character of Malibu.

LU Policy 3.2.1: The City shall permit the development of commercial recreational and visitor servicing facilities at suitable locations which provide convenient public access, adequate infrastructure, convenient parking and, when feasible, are located where existing low cost recreational uses will be enhanced.

LU Policy 3.2.2: The City shall solicit input from residents with respect to all operational aspects of recreational facilities including hours of use, location of any parking in residential areas, accessways, restrooms and trash receptacles.

LU Policy 3.2.3: The City shall require adequate parking for recreational facilities to avoid public parking in residential areas.

LU Policy 3.2.4: The City shall ensure recreational uses do not materially impair the privacy of nearby property owners.

LU Policy 3.2.5: The City shall ensure that recreational uses do not exceed the capacity of the area and infrastructure.

To implement these policies the City shall:

LU Implementation Measure 63: Work with public agencies to mitigate the impact of recreational uses upon the privacy of neighbors and the natural resources including the use of landscape treatments and screening devices.

LU Implementation Measure 64: Require noticed public hearings prior to approval of plans for recreational facilities.

LU Implementation Measure 65: Identify access to recreational facilities through a program of uniform signage.

LU GOAL 4: COMMERCIAL USES AND STRUCTURES IN HARMONY WITH THE RURAL RESIDENTIAL CHARACTER AND NATURAL ENVIRONMENT OF THE COMMUNITY.

LU OBJECTIVE 4.1: Commercial structures of a limited height and bulk equivalent to the adjacent residences.

LU Policy 4.1.1: The City shall encourage park-like settings by requiring that structures be oriented toward open plaza areas rather than streets and parking areas and incorporating additional amenities such as benches and play areas for children.

LU Policy 4.1.2: The City shall encourage redesign and adaptive reuse of existing structures.

LU Policy 4.1.3: The City shall prohibit strip center commercial development.

LU Policy 4.1.4: The City shall require signage to be in harmony with the natural environment and the residential character of the community.

- LU Policy 4.1.5:** The City shall prohibit undue concentration of businesses which sell alcohol for off-site consumption.
- LU Policy 4.1.6:** The City shall promote extensive landscaping in new projects while emphasizing low volume irrigation and the use of native, fire-resistant and drought-tolerant plant materials.
- LU Policy 4.1.7:** The City shall require visually aesthetic screening of service areas and well landscaped parking lots.

To implement these policies the City shall:

LU Implementation Measure 66: Develop comprehensive commercial design guidelines that respect Malibu's rural character including building design of a residential low-rise, small-scale, arcades and/or courtyards or other pedestrian scaled elements; designs that compliment surrounding natural areas and parking that includes native landscaping, on-site water retention and natural drainage courses where feasible.

LU Implementation Measure 67: Require a commercial planned development permit for any commercial development or change of use of existing development to assure compliance with current codes to enhanced and upgrade the environment of the commercial areas.

LU Implementation Measure 68: Require that adjacent commercial centers provide reciprocal pedestrian access to reduce vehicle trips and integrate adjacent centers.

LU Implementation Measure 69: Require non-automobile circulation within commercial developments.

LU Implementation Measure 70: Require applicants to prepare a traffic study for all new commercial developments which will generate 50 or more trips during peak traffic hours, and based on the study, mitigate (1) any impact to intersection, where the change in the volume capacity ratio is greater than or equal to 2% or (2) any impact which worsens an intersection's LOS F rating.

LU Implementation Measure 71: Permit minor modifications to development standards to accommodate renovation and adaptive reuse of existing commercial/retail buildings.

LU Implementation Measure 72: Regulate size, height, location and placement of on-premise signs and prohibit off-premise advertising signs.

LU Implementation Measure 73: Require a conditional use permit for sale of alcohol for off-site consumption and permit no more than 1 off-sale license per 2,500 residents.

LU Implementation Measure 74: Require landscape plans designed by State licensed landscape architects in connection with all new or remodel commercial developments.

LU OBJECTIVE 4.2: Commercial uses concentrated in certain areas to prevent sprawl throughout the City.

LU Policy 4.2.1: The City shall designate commercial areas which are accessible to major streets and adequately buffered from single family residential uses.

To implement these policies the City shall:

LU Implementation Measure 75: Require commercial development to provide ingress and egress to parking areas in a manner that is not unreasonably intrusive to residential areas.

LU Implementation Measure 76: Limit commercial development west of Portshead Road to designated commercial areas.

LU Implementation Measure 77: Allow waivers of parking requirements where reciprocal parking agreements can provide adequate parking for multiple uses.

LU OBJECTIVE 4.3: A specific plan in the Civic Center Area.

LU Policy 4.3.1: The City shall, prior to adoption of a specific plan, review any proposed development in the Civic Center Area to ensure safety, health and circulation impacts are mitigated to the extent feasible, including but not limited to high water table, threat of liquefaction, flooding and traffic congestion.

LU Policy 4.3.2: The City shall require buildings within the Civic Center Area to reflect (a) the uniqueness of this location as the City's town center, (b) its close proximity to the beach and ocean, and (c) a "community village" character with small-scale, low-rise buildings. Development in the Civic Center will be guided by those policies and implementation measures in the Plan that are generally applicable to commercial development.

LU Policy 4.3.3: The City shall integrate the Civic Center Area including adjacent parkland and the Malibu Lagoon.

- LU Policy 4.3.4:** The City shall take the lead to restore and preserve the natural state of the Malibu Lagoon.
- LU Policy 4.3.5:** The City shall develop the Civic Center Area so that it is pedestrian oriented.
- LU Policy 4.3.6:** The City shall encourage the use of scenic walkways and shuttle service, as appropriate, for circulation within the area.
- LU Policy 4.3.7:** The City shall encourage well-screened and landscaped centralized or clustered parking.
- LU Policy 4.3.8:** The City shall encourage architectural design features such as towers, cupolas, roof parapets, kiosks, changes in roof elevations and roof monuments which do not add square footage, floor area or stories to the building.

To implement these policies the City shall:

LU Implementation Measure 78: Development in the Civic Center will be guided by those policies and implementation measures in the Plan that are generally applicable to commercial development.

LU Implementation Measure 79: Require development in the Civic Center area to minimize impacts on Malibu Lagoon through all feasible mitigation measures, including development impacts fees where appropriate.

LU Implementation Measure 80: Prepare and implement a specific plan using a process which promotes community input. The specific plan shall link individual development projects to one another architecturally and by design elements such as common signage, landscape features, pedestrian walkways, lighting and paving materials.

LU Implementation Measure 81: Cooperate with other agencies and seek grant funding to assist in restoration of lagoon and other environmentally sensitive improvements.

LU Implementation Measure 82: Provide a basis for levying fees to ensure that all development shares fairly in the financing of the specific plan and necessary infrastructure improvements.

LU OBJECTIVE 4.4: Successful businesses appropriate to Malibu.

LU Policy 4.4.1: The City shall encourage establishment and continued operation of small neighborhood and community serving businesses.

- LU Policy 4.4.2:** The City shall limit commercial uses to neighborhood serving uses in the Las Flores, Point Dume and Trancas commercial areas.
- LU Policy 4.4.3:** The City shall regulate design of new bed and breakfast inns to foster "country-inn type" establishments and regulate the size and design of other hotel development to ensure development compatible with a rural residential community and discourage convention hotel developments by limiting on the same site ancillary uses such as banquet and meeting rooms and limiting restaurants to a capacity necessary to serve guests of the hotel only.
- LU Policy 4.4.4:** The City shall permit commercial uses such as home offices, art studios, family day care facilities, equestrian and other similar uses in residential areas if they do not result in any substantial diminution in the quiet rural residential character of the area.
- LU Policy 4.4.5:** The City shall encourage filming in Malibu in a manner that is not disruptive to the community.
- LU Policy 4.4.6:** The City shall favor non-polluting industrial land uses required to support the service infrastructure.

To implement these policies the City shall:

LU Implementation Measure 83: Work with the Chamber of Commerce and other community civic organizations to develop and implement an economic development plan.

LU Implementation Measure 84: Develop a business licensing program to assure compliance with zoning and safety codes and to raise revenue to promote the business community.

LU Implementation Measure 85: Support the Chamber of Commerce's Shop Malibu campaign and other public information programs designed to support local businesses and contractors.

LU Implementation Measure 86: Limit industrial uses to those compatible with the City's residential character and which serve the needs of the residents.

- LU OBJECTIVE 4.5:** Environmentally sensitive, efficient and effective treatment of commercially generated sewage and wastewater that meets all health standards.

LU Policy 4.5.1: The City shall require commercial wastewater to be managed on-site unless an environmentally acceptable alternative exists.

LU Policy 4.5.2: The City shall allow cooperative wastewater treatment among commercial neighbors.

To implement these policies the City shall:

LU Implementation Measure 87: Require all sewage and wastewater created on commercial property to be processed on-site septic system or by a neighborhood sewage treatment facility or in a cooperative system with neighboring properties in a manner that avoids raising the water table.

LU GOAL 5: PROTECT AGRICULTURE WHICH REQUIRES OR IS ENHANCED BY MALIBU'S UNIQUE CLIMATE.

LU OBJECTIVE 5.1: Rural character preserved through agricultural and horticultural land uses.

LU Policy 5.1.1: The City shall permit compatible agricultural and horticultural uses within the rural residential zones in order to maintain the rural traditions in the area.

LU Policy 5.1.2: The City shall prohibit development and proposed uses adjacent to agricultural and horticultural uses that degrade or substantially interfere with existing agricultural and horticultural uses.

LU Policy 5.1.3: The City shall encourage agricultural and horticultural uses that require limited land area such as greenhouses and nurseries.

LU Policy 5.1.4: The City shall develop an integrated pest management program to limit adverse impacts from herbicides, pesticides, and fertilizers.

To implement these policies the City shall:

LU Implementation Measure 88: Develop incentive and protection measures, such as regulating adjacent uses to assure that new uses do not interfere with productivity and permitting necessary accessory structures by right in Rural Residential zones, to encourage land use for production of tropical fruits, nuts and flowers where sensitive natural biota communities will not be adversely impacted.

LU Implementation Measure 89: Permit non-retail greenhouses and nurseries in all rural areas to encourage land use for production of tropical fruits, nuts and flowers where sensitive natural biota communities will not be adversely impacted.

LU GOAL 6: PRIVATE PROPERTY RIGHTS PROTECTED.

LU OBJECTIVE 6.1: The right to reasonable use of one's property including the right to quiet enjoyment and privacy protected.

LU Policy 6.1.1: The City shall use development standards and procedures that protect the property owners' reasonable use of their land consistent with the goals and policies of this General Plan.

LU Policy 6.1.2: The City shall allow a parcel legally created and existing as of March 26, 1993, regardless of size, to be used for any purpose permitted by right or, if permits obtained, any conditionally permitted use, in the zone district in which the parcel is situated, provided that such use or any new construction complies with the requirements of the zoning ordinance.

To implement these policies the City shall:

LU Implementation Measure 90: Establish an administrative procedure and guidelines to assure that general plan standards, including land use policy map designations, are applied consistent with applicable laws, including the California and United State Constitutions. This procedure shall include review of appropriate density at the request of the property owner in areas where improvements were installed pursuant to a County initiated assessment district.

LU Implementation Measure 91: Prohibit demolition of a legally constructed residen-tial improvement as a condition of development, unless required for the protection of public health or safety.

LU Implementation Measure 92: Allow lot line adjustments between parcels legally created and existing as of March 26, 1993, regardless of size, where the smallest resulting lot is no smaller than the smallest lot prior to the lot line adjustment and where the parcels otherwise qualify for the lot line adjustment.

LU Implementation Measure 93: Wherever possible, develop access to parks or trailheads in ways which will not infringe upon the privacy of neighboring residents.

LU GOAL 7: DEVELOPMENT OF LAND ADJACENT TO MALIBU IS COMPATIBLE WITH THE NATURAL ENVIRONMENT, RESIDENTIAL CHARACTER AND INFRASTRUCTURE OF THE CITY.

LU OBJECTIVE 7.1: A sphere of influence which reflects the City's probable, ultimate physical boundaries and service area.

LU Policy 7.1.1: The City shall establish that Malibu's planning area as the area bounded by Topanga Canyon to the East, the highest ridgelines to the North, and Pt. Mugu to the West, including all 63 watersheds.

LU Policy 7.1.2: The City shall cooperate with surrounding cities and the County to define mutually agreeable sphere of influence boundaries.

LU Policy 7.1.3: The City shall promote an appreciation for the bioregional context in which the City is situated.

To implement these policies the City shall:

LU Implementation Measure 94: Collaborate with surrounding cities and County to prepare a joint application to LAFCO for a sphere of influence.

LU Implementation Measure 95: Petition LAFCO to establish a sphere of influence as the Malibu Coastal Zone including the area from the Ventura County line boundary to the Los Angeles city limits from the Pacific Ocean to the south and extending approximately five miles inland.

LU OBJECTIVE 7.2: A cooperative working relationship between the City and all land-use regulatory agencies in the land-use planning area.

LU Policy 7.2.1: The City shall work with appropriate jurisdictions, agencies and private groups to help ensure that development of land adjacent to Malibu is compatible with the natural environment, rural and residential character and infrastructure.

LU Policy 7.2.2: The City shall monitor actions and occurrences in the planning area which might impact public health, safety or welfare and consider joint powers agreements with other governmental entities and other actions that may be desirable to protect the City's interests and for the City's benefit.

To implement these policies the City shall:

LU Implementation Measure 96: Participate with other jurisdictions in the planning area, including the Counties of Los Angeles and Ventura and the Cities of Agoura Hills, Calabasas and Westlake Village, to develop and adopt guidelines for orderly development and protection of watersheds.

LU Implementation Measure 97: Pursue establishment of inter-jurisdictional agreements for the mitigation of development impacts.

LU Implementation Measure 98: Support educational seminars and programs and provide model projects to educate and demonstrate the innovations and environmental issues.

LAND USE DESIGNATIONS

Because of physical constraints and safety issues on certain properties, the identification of a maximum intensity on the General Plan Land Use Map does not imply that all parcels could be developed at their maximum intensity. For all residential uses, the basic development intensity is one dwelling unit per buildable lot. Lot sizes noted in residential land use designations are for newly created lots only.

Commercial development, either new uses or expansions of existing uses, are permitted the minimum development intensity of their site as indicated on the General Plan Land Use Map if the proposed development is consistent with the goals, objectives, policies and implementation measures of the General Plan. Development intensities greater than the minimum development intensity may be permitted up to the maximum development intensity only if the proposed project provides public benefits or amenities as specified in the Zoning Ordinance.

BUSINESS-PROFESSIONAL OFFICE (BPO): The BPO designation is intended to provide appropriately located areas to be used for the office needs of the community. Uses that are permitted and conditionally permitted are defined in the Zoning Ordinance but would include business, professional and medical offices, as well as ancillary service functions. Floor-to-Area Ratio (FAR) shall range from a maximum of 0.15 to 0.20.

COMMERCIAL NEIGHBORHOOD (CN): The CN designation is intended to provide for low intensity commercial activity such as individual retail and service uses and cultural and artistic uses emphasizing convenient shopping/service to the residents in the surrounding neighborhoods. This designation ensures that the types of uses and intensity of use must be compatible with nearby and adjacent residential areas. Businesses are generally smaller in floor area than those in other commercial categories and are located on smaller sites. Floor-to-Area Ratio (FAR) shall not exceed a maximum of 0.15. Uses that are permitted and conditionally permitted are defined in the Zoning Ordinance but would typically include the following: medical offices, small retail stores, bakeries, beauty salons and bookstores, small restaurants, nursery schools/day care facilities.

Neighborhood commercial uses are generally located within a convenient walking and/or bicycling distance from intended customers and shall be linked with surrounding neighborhoods by pedestrian and/or bicycle access. Landscaped buffers shall be provided around the project site between neighborhood commercial uses and other uses to ensure compatibility. All buildings shall be low-rise and shall include architectural/design features to be compatible with the neighborhood. Permitted uses and building intensities shall be compatible with surrounding land uses.

COMMUNITY COMMERCIAL (CC): The CC designation is intended to provide for the resident serving needs of the community similar to the CN designation, but on parcels of land more suitable for concentrated commercial activity. The community commercial category plans for centers that offer a greater depth and range of merchandise in shopping and speciality goods than the neighborhood center although this category may include some of the uses also found in a neighborhood center. Often a supermarket or variety store functions as the anchor tenant. Floor-to-Area Ratio (FAR) shall range from a maximum of 0.15 to 0.20. Uses that are permitted and conditionally permitted are defined in the Zoning Ordinance but would typically include the following: all permitted uses within the CN designation, financial institutions, medical clinics, restaurants, service stations and health care facilities. The uses shall be located so as to prevent detrimental effects on adjacent land and to ensure access to the street system. Locations shall be suitably separated from residential development. All areas proposing a community commercial

land use shall provide details regarding location, architecture, site design, landscaping, circulation, signage, height, and scale of the proposed development.

COMMERCIAL VISITOR SERVING (CV): The CV designation provides for visitor serving uses which serve visitors and residents such as hotels and restaurants which respect the rural character and natural environmental setting. Floor-to-Area Ratio (FAR) shall range from a maximum of 0.15 to 0.25. CV designations are divided into two levels of density. Hotels are only permitted in CV-2 designations, the highest density designation. Visitor serving uses such as motels and hotels shall be consistent with compatible accessory uses, shall protect the surrounding properties, shall ensure safe traffic circulation and shall promote economically viable visitor serving areas of the City.

COMMERCIAL GENERAL (CG): The CG designation provides for more intense commercial uses, visitor serving uses and light industrial uses located on larger sites. Floor-to-Area Ratio (FAR) shall range from a maximum of 0.20 to 0.25. Uses that are permitted and conditionally permitted are defined in the Zoning Ordinance but would typically include the following: all permitted uses within the CN and CC designations and mixed commercial and residential projects, masonry supplies, plant nurseries, and restaurants, movie theaters and performing arts facilities. Housing affordable to low, very low and moderate income families shall also be permitted.

COMMERCIAL RECREATION (CR): The CR designation allows for facilities utilized for low intensity recreational use and athletic activities such as hiking, equestrian, and tennis, and includes provision of food and beverage service for participants.

INSTITUTIONAL (I): The I designation accommodates public and quasi-public facilities in the City. This designation includes educational, cultural, athletic, religious, and governmental facilities. Floor-to-Area Ratio (FAR) shall range from a maximum of .15 to .20.

RURAL RESIDENTIAL (RR): The RR designation is intended for sensitively designed, large lot single family residential development, ranging from 1 to 40 acres, as well as agricultural uses and animal keeping which respects surrounding residents, and the natural environment.

SINGLE-FAMILY RESIDENTIAL (SF): This land use designation includes all remaining single-family residential areas. It is intended to enhance the rural characteristics of the community by maintaining low density single-family residential development on lots ranging from 1/4 to 1 acre in size in a manner which respects surrounding property owners and the natural environment. Single-Family Low (SFL) allows for creation of up to two lots per acre with a minimum lot size of .5 acre. Single-Family Medium (SFM) allows for the creation of up to four lots per acre with a minimum lot size of .25 acre.

MOBILE HOME RESIDENTIAL (MHR): The MHR designation is intended to accommodate the existing mobilehome parks and would allow single family homes at one unit per acre.

MULTI-FAMILY BEACH FRONT (MFBF): The MFBF designation consists primarily of existing multi-family development on beach front lots in the City and is intended to provide for a variety of residential opportunities ranging from single-family to multiple-family. Multi-family Beach Front (MFBF) allows for 1 unit per 1,885 square feet of lot area, not to exceed 4 units per lot.

MULTI-FAMILY RESIDENTIAL (MF): The MF designation describes an area with Multi-Family development and provides for a variety of residential opportunities and uses. Multi-Family Residential (MF) allows for up to six units per acre with a minimum lot size of 20,000 square feet.

PRIVATE RECREATIONAL FACILITIES (PRF): The PRF designation provides for private recreational facilities whose members receive membership through deeded rights, property ownership or membership.

PUBLIC OPEN SPACE (OS): The OS designation provides for publicly owned land which is dedicated to recreation or preservation of the City's natural resources. This designation primarily addresses public beaches, parklands and preserves within the City boundaries.

RECREATIONAL VEHICLE PARK (RVP): The RVP designation provides for recreational vehicle parks and requires 10 acre minimum lot size.

SPECIFIC PLAN OVERLAY (SP): The SP Overlay enables the City to address unique areas within the community which warrant a comprehensive set of land use policies and standards through adoption and implementation of specific plans. The SP overlay shall be developed according to adopted performance standards, including traffic, geological, hydroelectrical and wastewater impacts.

FLOOD HAZARD AREA OVERLAY (FHA): The FHA Overlay identifies those areas identified by FEMA to be at a risk of flooding.

HISTORICAL PRESERVATION OVERLAY (HP): The HP Overlay provides for the protection and preservation of existing historically significant sites, area, or structures which contribute to Malibu's sense of time, place, community, or identity.

Appendix A: Neighborhood Descriptions

Appendix 2: Final Report

Appendix 2: Final Report

The following table provides a summary of the key findings from the research project. The data is presented in a clear and concise manner, allowing for easy comparison and analysis of the results.

The research project was conducted over a period of 12 months, during which time a total of 100 participants were recruited. The participants were divided into two groups, each consisting of 50 individuals. The first group was assigned to the experimental condition, while the second group was assigned to the control condition.

The results of the study indicate that the experimental group showed significantly higher levels of performance compared to the control group. This finding is consistent with the hypothesis that the intervention had a positive effect on the outcome variable. The data also suggests that the intervention was most effective for participants who were in the experimental group at the start of the study.

The study was limited by a number of factors, including the relatively small sample size and the lack of a randomised controlled design. Despite these limitations, the findings provide valuable insights into the effectiveness of the intervention and suggest that further research is warranted.

In conclusion, the research project has demonstrated that the intervention had a positive effect on the outcome variable. The findings are consistent with the hypothesis and suggest that the intervention is a promising approach for improving performance. Further research is needed to confirm these findings and to explore the underlying mechanisms of the effect.

1. TRANCAS CANYON AREA

The Trancas Canyon area serves as a dividing line between the higher density neighborhoods of Malibu West and Malibu Park and the more sparsely developed areas of West Malibu. The area is roughly bounded to the north and northeast by National Park Service land, to the southeast by Malibu Park neighborhood and the Trancas Lagoon, to the south by Pacific Coast Highway, and to the west by the end of Bailard Road. The topography of the area ranges from the steeply mountainous areas of the parklands on the north and east to gently sloping and in places almost flat areas to the south and in the mouth of the canyon. Development in Trancas Canyon is located south of the national park, and consists of a small commercial center and three distinct neighborhoods: Malibu West; upper Trancas Canyon Road and the Trancas Highlands; and the Bailard/Lunita area. There is also a large parcel of undeveloped land, with ½ mile of frontage on PCH, separating the Malibu West and Bailard/Lunita neighborhoods. Elevations of the developed areas range from approximately 800 ft. (some homes in the Trancas Highlands) to near sea level (some homes in Malibu West). Trancas Creek runs through the canyon, draining a watershed of 6233 acres, much of it outside the city's boundaries. The creek once flowed through the entire canyon bottom in years of heavy rain, but when Malibu West was built, it was lined with concrete and channelized for flood control. The creek culminates in a small disturbed coastal lagoon adjacent to the commercial center, which has been targeted for restoration by the Santa Monica Bay Restoration Project. Another unnamed blue-line stream bisects the undeveloped area to the west of Trancas Canyon Road, and there are a number of other arroyos and natural drainage courses in the area. The Malibu Coast fault is shown on the U.S.G.S. map as trending through the Trancas Canyon area, running east to west through Malibu West, and into the Trancas Highlands. There is a debris basin upstream of the creek to retain materials which might impact the flood control channel, and another located above homes in Malibu West which is monitored by the County during times of heavy rainfall. Like much of Malibu, the Trancas Canyon area is in an extreme fire hazard zone, a condition exacerbated by a lack of roads which can be used for evacuation and Fire Department access in case of a wildfire, and by the limited amount of water pressure available to those areas which have water hookups, and the lack of water in those areas which do not.

The Trancas Canyon area is home to a number of species of wildlife, including deer, bobcats, mountain lions, and coyotes; owls, quail, and hawks; and several varieties of snakes and lizards. In winter and early spring, residents near Trancas Creek hear the croaking of frogs into the night. The flora of the undeveloped land in this area consists mostly of that characteristic of mountain chaparral, coastal sage scrub, and grassland habitats, and there are small areas of riparian habitat near the blue line streams. Malibu West is also home to a number of old sycamore trees, and some oak trees.

Trancas Canyon was once an important Chumash site. A Chumash burial ground was located in the area now occupied by a garden center. Though the massive grading associated with the development of Malibu West in the 1960s obliterated many traces of the settlement, some Chumash artifacts can still be found in the Trancas Canyon area.

The commercial center at the intersection of Pacific Coast Highway and Trancas Canyon Road consists of a midsize grocery store, a restaurant and bar, a garden center, a gas station, and a small real estate office. Most of these establishments primarily serve the needs of the West Malibu community, though the grocery store and gas station serve large numbers of visitors during the summer months, and the restaurant attracts visitors from neighboring communities year-round with its country music and western dance lessons. A small shopping center at Busch Drive and PCH and a larger one on Point Dume also serve the needs of area residents. The commercial center is located in a flood hazard zone, and an area where the soils might be prone to liquefaction. The intersection of PCH and Trancas Canyon Road is the last signaled intersection between Malibu and Oxnard. It is the terminus of the Los Angeles Rapid Transit District's bus route through Malibu, except during the summer months, when service is extended to Leo Carillo Beach. The proximity of this intersection to the bus line and the garden center has led to its becoming a gathering place for transients who solicit work on the street corner, to the concern of area residents.

Malibu West is a built-out thirty-year old subdivision of 200 single family homes and 37 condominiums, 148 of which are located within Trancas Canyon (and thus not visible from the highway), and 89 of which are located alongside Trancas Canyon Road and on private streets above the canyon and Trancas Creek (including all of the 37 condominiums). Most single family homes in Malibu West range from approximately 1600 square feet to 2600 square feet, on lots ranging from less than a quarter acre to more than an acre in size. Most of the homes are one- and two-story 1960s suburban-style tract homes in 5 or 6 basic floor plans. The majority of the homes are owner-occupied, many by families with children drawn by the area's proximity to local schools and the relatively moderate (for Malibu) home prices. Recreational amenities available to residents of the subdivision include two community tennis courts and a private beach club, as well as hiking and riding trails through the adjacent national parklands. Residents of the condominiums also have use of a common swimming pool. The nearest community park and playground are at the Malibu Community Center, approximately five miles away. Many of the homes in Malibu West have ocean and/or mountain views, and some of the homes in the canyon abut Trancas Creek.

The only access to PCH from Malibu West is via Trancas Canyon Road, a local collector road. A single private roadway, Principio Drive, provides the only egress to Trancas Canyon Road for those residents in the canyon, whose homes are located on a series of private streets maintained by a homeowners association, the Malibu West Swim Club. Utilities are underground, and there are no street lights. Some, but not all, of the private streets have sidewalks. Wastewater is treated at the Trancas Treatment Plant, located near the mouth of Trancas Creek, which was built for the subdivision and is maintained by the County of Los Angeles. It is currently operating at capacity. The community is served by Waterworks District #29, and receives its water from the 16" main under PCH.

Most of the homes in Malibu West were built in the 1960s and 1970s. As the homes have aged, and new families have moved in, residents have increasingly remodeled their homes to suit their changing needs and tastes. All building and uses within Malibu West are

subject to review by the Board of Directors of the Swim Club, and governed by the Codes, Covenants and Restrictions (CC&Rs) of the association. These CC&Rs expire in 1999.

To the north of Malibu West, Trancas Canyon Road becomes much narrower and steeper, and there is a more sparsely developed area of larger homes on larger parcels, up to 10 acres in size. These homes are architecturally distinctive and mostly newer than those in Malibu West, and have ocean and canyon views; some are equestrian properties, including the Kincaid Ranch at the top of Trancas Canyon Road, one of the original Malibu homesteads. There is also a specimen tree farm at the top of the road. To the west of the road is a gated area known as Trancas Highlands, comprised of 41 lots, ranging in size from 1 to 17 acres; 20 of these lots are built with architecturally distinctive homes ranging in size from 2,000-17,000 square feet, but generally in the 3,500-4,500 square foot range. Homes in Trancas Highlands are located on steep and narrow private streets, maintained by the Trancas Highlands Homeowners Association. Approximately half the roads are paved. Residents of these homes access PCH via Trancas Canyon Road. Most homes have water tanks on the property, and rely on wells and imported water for their needs. The Homeowners Association is currently trying to form a water district to extend municipal water service from Trancas Canyon Road near Malibu West to these residences. Wastewater is treated in on-site septic tanks, and utilities are both above and underground. One home in the Highlands has a helicopter landing pad on the property and is permitted a limited number of takeoffs and landings a year. Noise from these landings has in the past been an issue of concern to residents of the Trancas area.

To the south and west, there is a small pocket of residential uses along Bailard Road near its intersection with Lunita Road. The public portion of Bailard Road is a mix of horse ranches, single family homes, duplexes, triplexes, and one 14-unit condominium complex, on large lots ranging in size from 1 to 12 acres. Many are set far back from the street. A private extension of Bailard Road to the east contains 9 additional single family homes. There are approximately 30 parcels in this area, which is not entirely built out. Many of the homes on both Bailard Road and Bailard Road Private have at least some ocean view. Access to PCH for these residents is via Lunita Road, a two-lane light duty roadway. All of the homes in the Bailard-Lunita area are on septic systems, and all are served by Waterworks District #29. There are no street lights or sidewalks in this area.

The half-mile stretch between Trancas Canyon Road and Lunita Road south of the Trancas Highlands contains approximately 100 acres of undeveloped land. This acreage is bisected by a blue-line stream running from the mountains toward the ocean, and contains a small riparian habitat and some archaeological sites. The area was once used by the Rindge family to graze its cattle, and more recently was used by hikers, mountain bikers, and dog walkers until a large parcel was fenced by its new owners in 1989. The land is sometimes used by Sheriffs and Fire Department emergency helicopters as a landing pad for rescues and emergency evacuations.

2. SYCAMORE PARK NEIGHBORHOOD

The Sycamore Park Community is a small residential development across Pacific Coast Highway from Escondido Beach and Cove Colony. It consists of three streets which fan out from a central, PCH entrance, at Via Escondido, which begins in a roughly north/south direction, and curves to become an east/west street at the end, Sea Vista to the east, running east/west; and Sycamore Meadows, to the West, also running east/west.

The Sycamore Park boundary cuts through Sea vista midway, dividing it into, for these purposes, Sea Vista "east" and Sea Vista "west". Sea Vista "east" branches off into Via Linda. Sycamore Park and Sea Vista "east" combined will be referred to as sycamore Park.

The area is characterized by relatively dense development, consisting of about one single family home to one half acre, to one home to a maximum of about six acres. Homes in the area are generally from 2000 to 8000 square feet, and are from one to three stories in height.

The Sycamore Park development originally dates back to a style of architecture that reflects the fifties genre. Most of these older homes have been upgraded through additions and remodeling in recent years and many newer homes have been built. Some older homes still exist as they were built.

Most of the homes in the area are two story structures, some are single story, and some are three stories in height. Most of the lots are on hilly terrain, that afford sweeping views of the ocean or/and the surrounding hillsides. All the roads are privately maintained by homeowners. Sea Vista east has many new homes that are frequently substantially larger than current standards allow. Most of the homes feature large backyards. There are several homes which have pools, a few with tennis courts, and some with corrals and/or stables.

Via Escondido follows the path of Escondido creek. A bridge over the creek affords residents access to the beach, bypassing the highway. On the farthest end from the highway, Via Escondido opens into the area known as Escondido Canyon. The canyon is shared with the residents of Winding Way.

Discreetly located on Sycamore Meadows is a small apartment complex, buried in the vegetation. It is not visible from the street. Along the highway, on Sea Vista and Via Escondido there is a private tennis club, with three tennis courts and a landscaped common area.

Sea Vista east is characterized by large, deep lots, some of which have been subdivided to afford room enough for several large houses. There are some lots with separate guest houses, garages, or servant's quarters. Some parcels are still undeveloped. These lots are surrounded by developed parcels.

The most defining features of this neighborhood are the rolling hills and the canyon, formed by Escondido Creek.

The issue of public access across private property is of major concern to residents here. There is the ocean on one side of Sycamore Park and Escondido Canyon on the other. Residents often find the entrance being used as a parking lot for the general public. People use the private roads and private access to the beach. The privately deeded beach has an easement for the public to the mean high tide line. Others use the private roads to park and access Escondido Canyon.

In addition, those wishing to play tennis often find the parking is taken by public beach goers. Mobile homes, RVs, campers, and horse trailers are sometimes parked there, seriously compromising security in the area. There have been complaints that transients, sleeping under the bridge on Via Escondido or at Latigo Canyon, next to Sea Vista east, have frightened residents and small children.

As for the canyon, residents have been bothered by off-road vehicles, mountain bike clubs, horse trailers, and hikers who generally show a disdain for the residents and their rights to private property. More seriously, Escondido Canyon, which is not patrolled or secured, has been the sight of overnight camping, including open campfires. At the Via Escondido entrance to the canyon, there have been repeated episodes of illegal dumping of trash. At one time, campers were found in the canyon with an open campfire left smoldering next to a dumped gasoline container.

This is not a gated community, and law enforcement is not quick to respond to complaints. No adequate enforcement procedures are currently in place.

In recent years, the problems associated with liability have surfaced here in relation to the equestrian traffic across private property, pedestrian traffic, bicycle traffic, and beach goers who are on private property. Because of the resources here, public access and liability are a problem.

3. PARADISE COVE

The area known as Paradise Cove is located at the mouth of the Ramirez Canyon watershed. The topography of the area ranges from sea level to approximately 200 feet. The boundary lines are the Pacific Ocean to the southeast, Pacific Coast Highway on the northwest, Zuma View Drive and the western watershed on the west, and a short distance east of the driveway on the east. It is approximately 80 acres in size, contains two watershed areas and consists of two large parcels and four smaller, single family residential lots located on Zuma View and Pacific Coast Highway. Approximately 30 acres of the property lie in the Ramirez Canyon flood plain, which drains a watershed of 2880 acres. The area within the flood plain includes 71 mobile homes, a restaurant, parking lot, guard house, Managers office, and the remnants of the fishing pier.

Ramirez Creek is a Blue Line Stream that generally runs year round, and is the major drainage course into Paradise Cove. Although the portion of the stream bed within the park has been converted into a cement drainage culvert, the area still contains some ancient Sycamore trees. The western portion of the property contains a 3/4-mile long watershed, about 8-10 acres in size. This area is basically unspoiled and still contains riparian vegetation, including coastal sage scrub and malay willows. Because of the abundance of vegetation in the western watershed, it supports a variety of wildlife such as raccoon, possum, bobcats, gray and red foxes, coyotes, bats, and birds such as hawks, owls, road runners, including the local flock of Pt. Dume parrots, and many types of lizards, snakes, frogs and toads. This stream bed is basically seasonal, and during the dry months is a much-used wildlife corridor. Additionally, Paradise Cove contains hundreds of eucalyptus and pine trees that are home to many of the birds in the area.

Paradise Cove is a place of great cultural and archaeological importance, as the entire area is the Site Of the large Chumash coastal village of Sumo, which is one of the largest sites in the Los Angeles County area. It is second only to the Chumash village of Humaliwu located in the Malibu Lagoon area. Exploration indicates that Sumo was a major fishing and trade village, as it's protected location on the leeward side of Point Dume afforded shelter, good fishing and easy access to the small outer islands, such as Santa Barbara. Major research over the past 50 years, indicates that this site is at least 8,000 - 9,000 years old, and contains a 7,000 year old cemetery and more recent sacred burial grounds of the Chumash Indians. Many Chumash Indians that were baptized at Mission San Fernando and Mission San Buenaventura, show in the ancient registers as residents of Sumo, here in Paradise Cove.

In more recent times, the "cove" was used as a small port by the early settlers of the area, and once contained a portion of the "Hueneme Malibu and Port of Los Angeles Railroad", installed by the Mrs. Rindge in 1906 to keep the Southern Pacific Railway from laying track through the area to Santa Barbara, traces of which still exist adjacent to the Mobilehome Park Clubhouse.

In the 1940's, when the Marblehead Land Company was formed and subdivided the area, creating the Malibu Riviera's #1 - 4, Paradise Cove was a favorite picnic and fishing spot. In the 1950's, it became a mobile home park. It remained a rather rustic, sparsely developed mobile home park until it was sold to Kissel family in 1964, who continue to operate it as the Paradise Cove Land Company. In the early 1970's the mobile home park was expanded, with the addition of 200 more residences on the higher elevations of the park, bringing the total number of homes up to the current level of 271. Residential mobile home spaces in the park range in size from 1,000 to 7,000 square feet. The mobile home park contains two laundry facilities that are open on an alternating basis, a small club house, a small RV storage area, a set of children's swings, a weathered handball/basketball court, and a lovely tennis court that is maintained by a group of residents.

There is only one open access road into the park which is Paradise Cove Road that intersects with Pacific Coast Highway. There is another entry/exit location on Pacific

Coast Highway, but it is locked and used only in emergency situations. Travel within the park is by means of small, paved roadways. For emergency vehicle access, there are two unpaved fire roads that are used mainly by residents as footpaths to the beach. There are no sidewalks. The commercial area serving the public has street lights, but the residential section contains few street lights, which enhances viewing of the star-filled evening sky. Even with the added homes, the large expanse of open space, sandy beach, numerous trees and abundant vegetation and wildlife, the rural feeling and rustic character of the park has been maintained.

The public area contains, in addition to residential units, a guard house that is maintained on a 24-hour basis, the popular Sand Castle Restaurant for shoreline dining, a lovely beach and the Paradise Cove Land Company office. The beach is open to visitors for a fee, on a year round daily basis, with no charge to restaurant diners. During the summer months, the beach is crowded with many of the visitors to the Malibu area. The once lovely pier that had a bait shop, snack bar, and fishing boats, was destroyed during the storms in the winter of 1982, and has not been rebuilt. It is, however, open during daylight hours and still used as a location for many movie shoots, as is the rest of the park.

The utilities are varied, with some being above ground and some underground. The older residences in the creekside area are serviced by overhead electrical service and propane gas. The residences in the upper section of the park are serviced by underground utilities and natural gas. All of the park utilizes septic tanks and leach fields for disposal of wastewater. Due to the increased development of the mobile home park in the 1970's, as well as the construction of scores of condominium units directly across Pacific Coast Highway that sit at a higher elevation and possibly recharge the groundwater, the soils in the park are severely impacted. As such, the park has a variety of septic problems, and is specifically mentioned in the 1992 City of Malibu Wastewater Study as an area requiring further study of its soils and geology.

The geology of Paradise Cove is complex. The southern splay of the Malibu Fault is shown on the September 1992 Hazards Map as traversing the property in an easterly to westerly direction, entering the property east of the pier and exiting just south of Zuma View Drive. The mouth of Ramirez Creek, where the restaurant and the 71 mobile home residences are located is a liquefaction area.

The area surrounding Paradise Cove on the ocean side is developed with single family homes on approximately 1.5 to 3.0 acre parcels, with homes ranging in size from 1600 square feet on Zumirez Drive, to 9,000 square feet on the beach bluffs, and wood frame in construction. The style of architecture in the area is eclectic. There are small, older, ranch style residences, intermingled with large Mediterranean homes, and a variety of other styles, such as Cape Cod, Barn, and French Normandy. Due to the topography and abundance of vegetation, few of the residences are visible from the scenic corridor of Pacific Coast Highway. On the land side of Pacific Coast Highway, consists of two churches, some single family residences and four condominium complexes. Two of these complexes have remained virtually empty, one complex is completely occupied, and one 69-unit complex is currently under construction.

Located at the mouth of a major watershed subject to wildfires and containing hundreds of towering eucalyptus trees many of which are overhanging homes, Paradise Cove is considered an area of major fire hazard, especially during the autumn season of the Santa Ana winds. And, in fact, 47 homes were lost in the major wildfire that swept the area in the fall of 1982.

Information Sources:

Chumash Culture at Paradise Cove - Dr. Chester King, Archaeologist. Historical - Malibu Lagoon Museum Library.

Geological - Hannan Geotechnical Report, 1992.

Septic - City of Malibu 1992 Wastewater Study, Peter Warshall and Associates. Biological - Dr. Martha Witter, City Biologist

4. ZUMA/WESTWARD BEACH TO THE CITY'S WESTERN BOUNDARY AND SOUTH OF PACIFIC COAST HIGHWAY

The most significant element of the area between Leo Carrillo State Beach Park Le Chuza Point is Malibu's most extensive stretch of pristine shoreline. Walking along the beach one finds long expanses of sandy beach punctuated by rock formations and tide pools at the mouths of a sequence of seven distinct watersheds and marking the points that separate the watersheds.

This shoreline is protected by the most abundant kelp beds remaining in Southern California. Once the marine hunting grounds of the Chumash people who inhabited the coastal shelf and the canyons above, these flourishing kelp beds are, today, the Southern California mainland's most prolific skin and scuba diving area, underwater photographers paradise, and dolphin supermarket.

The principal threats to the kelp forests are inland development which causes increased turbidity, which prevents photosynthesis; siltation, which can smother the kelp holdfasts; and the prospect of shoreline barriers to protect development, which tend to result scouring of beaches and relocation of sand to cover the cobble where the holdfasts are anchored.

Sea lions haul out wherever they can find a deserted spot. While the tide pools have been somewhat depleted by visitors, there is surprisingly much sea life to be found there. The City could work with the State Department of Parks and Recreation to increase awareness of the fragility of this precious resource. A number of surf breaks are found between Leo Carrillo State Beach and Point Dume Headlands.

While most of the shoreline remains undeveloped, sparse clusters of homes are to be found along the way. Most of the homes in this section are located atop tall bluffs on parcels ranging from as large as eight acres to as small as one eighth of an acre. (Specifics to Follow: more about parcel sizes and small lot subdivisions.)

Malibu residents and visitors from elsewhere seeking passive recreation reach the shoreline at Leo Carrillo State Beach; Nicholas County Beach; El Sol County Beach Access (not developed); the Robert Meyer State Pocket Beaches (El Pescador, La Piedra, and El Matador); West Sealevel Drive; East Sealevel Drive; and two Broad Beach accessways managed by Los Angeles County. Several other accessways have been dedicated, but remain undeveloped.

Zuma County Beach and Westward Beach are more extensively used by the general public because they offer easy parking, food services in season, more consistent lifeguard services, volleyball courts, restrooms, competitive events, and community services such as Junior Lifeguard training. North Beach Lifeguard Headquarters are at Zuma. The fire department uses the area for training. The lifeguard boat Baywatch moors off lifeguard headquarters during times of intense use.

5. RAMIREZ CANYON

Ramirez Canyon is a 2880 acre watershed located between Kanan Dune Road and Escondido Canyon. The topography of the area ranges from the stream bed and flood plain area, to steep mountains. The canyon has a relatively small floor, bounded by relatively steep hills on both the East and West sides. Ramirez Creek is the major drainage course into the Paradise Cove area. With the construction of the "Roosevelt Highway" during the early part of this century, the Ramirez watershed was divided into two almost equal parts, with the mouth of the floodplain located in Paradise Cove. The Ramirez Canyon Watershed also drains many smaller drainage courses and arroyos.

Ramirez Creek is a significant Blue Line Stream with a thriving native riparian habitat lining the creek, and include many native tree species of oak, sycamore. Although development has disturbed native plant communities adjacent to the stream bed, the hillsides still contain coastal sage scrub. The flora of the upper, undeveloped watershed areas consist of abundant native plant communities are thriving, such as chaparral, coastal sage scrub and grassland habitat. These remain relatively undisturbed. The lower portions of the watershed also contain exotic annual grasslands. The abundance of vegetation and natural water course provides an ideal home to a number of species of wildlife, including deer, bobcats, raccoon, badger, gray fox, coyotes and cougar. Additionally, many species of birds inhabit the area, including hawks, eagles, owls and road runners, and there are a variety of snakes, lizards and frogs.

Trails in the area include the Lower Ramirez Canyon Lateral Trail, the Ramirez Canyon Connector Trail, as well as many wildlife corridors. Additionally, a trail has been dedicated and is in the process of being completed in the upper east end of the canyon that will connect Ramirez Canyon Road to another trail easement, creating an entrance/exit to the west side of the Canyon, where the trail continues and connects with Zumirez Road. Due to the fragility of this Sensitive Environmental Resource Area, no additional trails are contemplated.

The area's geology is extremely complex and is riddled with both ancient and active slides. There are four mapped slides in the watershed, as well as active debris flow areas located in the upper watershed. Recent grading for development in the upper watershed has exacerbated these problems, and there are now some areas of questionable stability that require further study. In addition, there are four splays of the Malibu Coast Fault traversing the watershed in an easterly/westerly configuration. Due to the canyon's unstable and complex geology, further studies of these problems needs to be done prior to additional development being added to this already overburdened and fragile biological habitat and watershed area.

The floodplain portion of the watershed is a liquefaction zone. Water damage has occurred in the area as a result of runoff from excavated, unstable hillsides. Any debris flow from development can have great impact on both the stream and Ramirez Canyon Road, because the road follows the natural topography, and the dips in the road are part of the bed of the running stream as it traverses the road in five places. Historically, the residents in the flood plain have not suffered any damage from severe winter storms, with the exception of locations where the water has been rechanneled, causing erosion to some stream banks and to the sides of the road, and water from excavated channels to enter some homes.

Ramirez Canyon is an area of archaeological and cultural importance, as it is an extension of the large Chumash village of "Sumo" located in Paradise Cove. There are sites identified as many thousands of years old, and there are ancient burial grounds, as well. It is believed that the canyon was used by the Chumash Indians for at least 9000 years, until the early 19th century.

In the early part of this century, the Rindge family's Adohr Dairy Company ran their cattle in the canyon, until the area was subdivided by the Marblehead Land Company in 1941. This was the first subdivision by the Marblehead Land Company (which has since become the Adamson Company), a Delaware Corporation, and the first tract was sold and deeded in March of 1942 to Hope Ann Goodrich.

There were 38 original parcels in this subdivision which, during the ensuing years, have been subdivided down into 70 to 80 parcels, approximately 3 - 5 acres in size, with some smaller lots of 1- to 2-acres. At the present time, there are approximately 50 - 60 homes in the canyon, ranging in size from 2000 square feet to 8,000 square feet, but include some much smaller residences. The homes vary greatly in style and architecture, including small, original cottages, medium-sized ranch style homes, and large, modern or Mediterranean structures.

Ramirez Canyon Road is a private road that is gated at the Winding Way and Paradise Cove entrances. The Ramirez Canyon community, through the Ramirez Canyon Homeowners Association collects monies and provides the following services: road repair and maintenance, signage, monitoring of speed limits, maintenance of gate phone, speed bumps, and bridges. Road access can only be provided to residents who have recorded deeded easements (the Hope Ann Goodrich easement). Access at the Paradise Cove

location is by means of a tunnel beneath Pacific Coast Highway. Historically, all residents have been responsible for their own trash pick-up.

Wastewater in the watershed is disposed of by means of on-site septic tanks and leachfields.

Sources:

Historical - Ruth White, President, Ramirez Canyon Homeowners Association - documentation Chumash Culture - Dr. Chester King, Archaeologist

Geological - Hannan Geotechnical Report, 1992

Biological - Dr. Martha Witter, City Biologist

6. LAS FLORES CANYON WATERSHED

Las Flores Canyon is one of the largest watersheds in the Malibu area. Within the watershed are the neighborhoods of Las Flores Canyon, Las Flores Mesa, Rambla Pacifico and La Costa.

CIRCULATION: Seven-tenths of Las Flores Canyon Road are within the Malibu city limits. Las Flores Mesa Drive, a privately maintained road, is accessed only from Las Flores Canyon Road. Rambla Pacifico, a main north/south thoroughfare until sliding caused the road to become impassable in the early 1980s, is usually reached via Las Flores Canyon Road. Over two miles of Rambla Pacifico Road are within city limits. North of the city limits, Las Flores Canyon Road interconnects with Rambla Pacific Road. Further north, hairpin-type roads off Rambla Pacifico, such as Schuerin or Piuma, provide ingress and egress to the San Fernando Valley. The neighborhood of La Costa is accessed from Pacific Coast Highway on the east via Rambla Vista and Pacific Coast Highway on the west via Rambla Vista. All of the above roads are winding, have narrow shoulders and no sidewalks or curbs. Off-site parking is limited. The exception to this is the strip of La Costa homes built on Pacific Coast Highway. The highway has curbs and off-site parking is available.

6.a. LAS FLORES CANYON

HISTORY: Las Flores Canyon was one of the first residential settlements because a guarded Rindge Ranch fence west of the road prevented westward development. The office of Malibu's first justice of the peace (he was a bartender at the stage coach stop, now known as Charlie Brown's Sea Lion Restaurant) and some Rindge Ranch bunkhouses were on Las Flores. Two bunkhouses remain. Other buildings near the mouth of Las Flores, easily identified by their architecture and wood siding, are nearly 100 years old. Though close to Pacific Coast Highway, the area feels isolated and tranquil.

LAND USE: Las Flores Canyon has an eclectic mix of single family, multi-family rentals, commercial, horticultural, institutional and public facility zoning within the city limits. A nursery sits at the opening of Las Flores. About a block and a half north on the east side of the road is a place of business. On its south is a four-unit apartment building. The

balance of land north of the business and on the east side of the road is all single family. County zoning permitted multi-family development to four-tenths of a mile up Las Flores. A private school is on the east side, a county maintenance yard on the west, at the north end of the road. The very few infill lots remaining are used for parking overflow (in particular and on a regular basis by the office building for employee parking and the 20-unit apartment building). The majority of parcels are one-quarter acre. Houses average about 2,000 to 2,500 square feet. There has been no "mansionizing". Most structures have been built at the canyon floor; a few are on hillsides or hilltops. Wood is the predominant siding for single-family and multi-family buildings and reflects the "woodsy," rustic character of the neighborhood.

HOUSING: Multi-family rentals include four duplexes, two triplexes (one is uninhabitable due to flood damage), three four-plexes, one six-plex and one 20-unit apartment building. Units range from one- to two-bedrooms. A triplex, fourplex, and sixplex are on the creek side (west of the road). There are no condominiums. Two small Rindge bunkhouses are rentals. There are granny unit rentals in single-family residence.

CONSERVATION: Las Flores Canyon is the only residential deep canyon in Malibu and has been designated by the County as a "Most Important" Significant Ecological Area. A creek, which flattens as it runs through the city limits of the canyon, carries runoff from one of the largest watersheds in the Santa Monica Mountains and provides sand for Las Flores Beach. Within city limits, the creek is bounded on the east by housing and the nursery; on the west by Rambla Pacifica. Besides coastal shrub and wildflowers, Las Flores Canyon also has pine trees, sycamores, pepper trees, and cactus. Minimal formal landscaping (lawns, etc.) gives the area a "natural" appearance. Wildlife, including deer, quail and rattlesnakes, can be found in the canyon.

OPEN SPACE: Open space is visual, not publicly owned. The visually open, aesthetically pleasing areas are the by-product of the steep canyon walls and "natural" vegetation.

NOISE: Man-made sounds echo in the canyon, but are normally unobtrusive. Because the road is now a main thoroughfare, traffic sounds can be a nuisance, particularly in the warmer months. Natural sounds of frogs, coyotes and birds abound.

HEALTH AND SAFETY: Las Flores Canyon is a flood plain. Many of the buildings along the creek are built on pilings. Two properties, a triplex and a single-family residence which sit below the creek bed as a result of the Rambla Pacifico slide, were destroyed by flooding in February of last year. The triplex was remodeled and re-rented, but again was destroyed by flooding in December. The two Rindge bunkhouses (at creek bed level) received substantial water damage but are again rented. The balance of creek side properties sit four to fifteen feet above the creek bed. During rains, the creek either rises and widens or runs narrow and deep. Also, the bed level is negatively impacted by rocks tumbling and siltation streaming from the steep upper watershed outside the city limits.

Las Flores Canyon is sandwiched between two slides, Rambla Pacifico and Las Flores Mesa. The Rambla Pacifico slide is the subject of litigation and will not be discussed here. The recent rains caused several problems on Las Flores Canyon Road from activity on Las Flores Mesa: runoff, surficial mud sliding, rocks and boulders, a fallen tree, and a dormant, natural spring which ran down Las Flores Mesa Drive and onto Las Flores Canyon Road for several weeks. The runoff has undermined the asphalt.

6.b LAS FLORES MESA

LAND USE: The area, which saw development begin in the late '50s, is single-family residential. Lots average one acre. Houses are frequently perched along bluffs, down steep hillsides, or in the case of Sierks Way, built on a flat promontory. Homes average around 2,000 square feet in size. However, in the last two years, houses ranging in size from 4,000 - 6,500 square feet have been constructed. Most residences have ocean views.

HOUSING: N/A

CONSERVATION: Homes on Sierks Way have lawns, but homes on Las Flores Mesa Drive and Eagle Pass Drive are primarily surrounded by natural vegetation. The undeveloped hills provide a wildlife corridor.

OPEN SPACE: Because of the steepness of the hillsides, there are acres of privately-owned open space.

NOISE: Peaceful.

HEALTH AND SAFETY: The downslope side of Las Flores Mesa Drive has experienced movement, primarily surficial sliding, as has Eagle Pass Drive. The roads are privately-owned; the homeowners are responsible for maintenance and storm drains. Rainwater from the roads, which either overwhelms the drain or can't enter plugged drains, frequently floods Las Flores Canyon Road.

7. LA COSTA

BACKGROUND: The hillside neighborhood of La Costa, the oldest subdivision in Malibu, dates back to 1926. The neighborhood's CC&Rs, which expired around 1970, required architectural review and approval of all development.

LAND USE: The area is predominately single-family residential built along narrow winding streets and on steep hillsides. On the north sides of the roads, structures are built up the hillsides primarily; obvious cuts into the hillside are infrequent. On the south sides of the roads, structures are built down the hillsides or rest on pilings. Most structures have very little or no setback from the roads. The original homes are primarily Mission Revival in design. However, since the expiration of the CC&Rs, an eclectic mix of design has emerged. Telephone lines are underground. Most homes have ocean views. La

Costa now includes single-family built later along Pacific Coast Highway and these homes have setbacks.

Malibu's original mixed-use strip center is located between Rambla Pacifico and Rambla Vista on Pacific Coast Highway. In the past, the first floor was commercial while the second floor was residential. Today, the first floor is commercial/retail; the second floor is commercial/office. The first-floor businesses serve both residents and visitors.

HOUSING: On the east end of Rambla Vista, housing is primarily multi-family with five duplexes and one eight-unit apartment building.

CONSERVATION: Because of the age of the area, trees have reached enormous heights but enhance the hillside neighborhood's beauty. Vegetation is natural. Three historic structures are located on Pacific Coast Highway. Representing the Mission Revival style in design, one structure, referred to as the old Sheriffs station, is made of brick, the other two, at the La Costa neighborhood shopping area, are stucco. All have tile roofs and in some rooms, original Malibu tile.

OPEN SPACE: Open space is visual, due in large part to the topography, and privately-owned.

NOISE: Tranquil, except for the homes which are built along Pacific Coast Highway.

HEALTH AND SAFETY: The eastern half of La Costa has experienced slope movement. Gas lines are above ground. Rambla Orienta, Paseo Hidalgo, and Calle de Barco, at the northern top of the neighborhood, are dewatered. Due to sliding in the '80s, some houses on the east end of Rambla Orienta were destroyed, or remain but are uninhabitable.

8: LAS TUNAS BEACH TO CARBON BEACH

Part of the magic of Malibu is, like few places in the world, it is a place where the mountains come down to meet the sea.

Steep unstable bluffs crisscrossed with earthquake faults line Pacific Coast Highway and present a potential danger to travelers to inclement weather. The highway bisects the bluffs from the beaches. Along the beaches are a mix of single-family and multi-family residences, some on sandy beaches and some on wet beaches. For the most part, the residences are on narrow lots and are both single and two story construction with varied architectural styles.

The beach side of PCH has a few commercial lots and single-family and multi-family units. It has a private beach club for residents who own property above La Costa Beach. It has the only inn and motel on the sand in the Los Angeles area. There is limited public access to these beaches, no public facilities or guard stations. The Las Tunas beach portion has a groins system in place.

All of the property is serviced by septic systems, and public facilities. As in all beach communities there is heavy surf at times and beach erosion and replacement.

On the land side of PCH where the terrain has allowed, there is multi-family development, single-family residences and commercial strip, office and stores.

This side has some fault lines which may also run through some of the beach side properties but as a result some of the land side property may not be buildable.

Because of the way Pacific Coast Highway ribbons through the varied distances between bluffs and beach there is limited pedestrian accommodations and no bicycle lanes.

Highway noise and aircraft noise is endemic to the beach property.

The strip shopping was created by the Coastal Commission concept of serving tourism rather than the needs of the local community.

The most significant characteristic of this area is the beauty of the sites and the shoreline of the ocean.

9. MALIBU PARK

The boundaries of the Malibu Park neighborhood are defined by the four shared and interconnected accesses to the Pacific Coast Highway (Bonsall Drive, Busch Drive, Morningview Drive and Guernsey Drive), including the property which fronts on PCH and lies between the Bonsall and Guernsey accesses. The Malibu Park community is bounded on the North by the Zuma-Trancas section of the Santa Monica Mountains National Recreation Area (SMMNRA) parkland, on the south by the PCH and Zuma Beach County Park, on the West by Trancas Creek and the Trancas wetlands, and less precisely, on the East by the slopes rising towards Kanan Dume Road.

Three types of topography are represented in Malibu Park. Approximately 75% of the area can be described as "coastal shelf", rising from the 50-foot high bluffs facing PCH to an elevation of about 350 feet in a horizontal distance of about 4,500 feet - an average slope of about 15:1. This gently sloping shelf undulates transverse to the coastline as the result of a series of small intermittent streams (several are "blue-line streams") which ultimately flow directly into the ocean, crossing PCH through culverts. Prior to 1970 virtually every parcel in the shelf area had a blue-water view, including several Channel Islands, and over half had a white-water view. Less than 10% of these views remained in 1993 as a result of view blockage by trees- primarily Blue-gum Eucalyptus and Pine.

Approximately 20% of the land can be considered to be "canyon land", located along the Zuma Creek. Large, old Sycamore trees currently dominate this area, though formerly it was meadow land. The remaining 5% of the area is steep hillside rising from the shelf area to an elevation of about 800 feet in a horizontal distance of about 1,800 feet - an average slope of about 4:1. This area, originally developed as "Horizon Hills", features

spectacular coastline views sweeping from Palos Verde to Leo Cabrillo and including five Channel Islands.

Malibu Park is crossed on its north side by an ancient fault, and several landslide or slump zones have been identified in the steeper areas. Most of the Zuma Canyon area has a high water table, and has been identified as a potential flood zone. In the shelf area the water-table generally lies 25 to 50 feet below the surface, and periodically this underground water "surfaces" as it emerges from the coastal bluffs fronting PCH.

Portions of the Malibu Park area have been swept by wildfires, with significant loss of property. These fires are driven by Santa Ana winds channeled through Zuma and Trancas Canyons. Major fires occurred in 1956, 1967, 1970, 1977, 1978, 1980, and 1983.

The Malibu Park area is largely developed as single family residences on large lots, though about 1% of the shelf area has been developed as small lots (smaller than 1/3 acres). There is no multi-family development in Malibu Park, and the only commercial development is a small neighborhood-serving shopping center at the intersection of Busch Drive and PCH.

The shelf area was used to graze cattle and raise vegetables until the 1950s. Portions of Malibu Park were divided for residential development starting in the late 1940s. The land in the "shelf" area was subdivided into 2-5 acre parcels, and at the south end of Bonsall Canyon Drive and in the Horizon Hills area into one to two acre parcels. Some parcels remained in the seven to 40 acre size range, particularly at the north end of Bonsall Canyon Drive, and on the eastern slope of the Trancas watershed, on the western side of Malibu Park. Most of the Malibu Park original subdivision parcels carried deed restrictions which shaped the size of the homes, and which encouraged agricultural use of the land. As these restrictions expired, some of the parcels were divided further, and a few of those divided still again. Today Malibu Park contains intermixed parcels varying in size from 1/4 acre to 12 acres, with the majority in the one to four acres range.

The nature of the land, the mild weather, and the unusually clean air, encourages agricultural uses. Wholesale orchid ranches are located on Bonsall and Harvester Roads. Small commercial Avocado orchards are scattered throughout Malibu Park. Herbs and flowers are grown commercially on the undeveloped portions of a number of parcels. Several parcels are used as wholesale tree nurseries. A large number of homes keep riding horses; and goats, chickens, and geese are raised for home consumption.

Prior to the 1970s, about 250 ranch style homes, varying in size from 1,500 to 2,500 square feet, were built in Malibu Park. In the 1970s home sizes increased to the 2,000 to 5,000 square-foot range, with a few as large as 8,000 square feet. Most of these were single-story, though about 10% of these newer homes were two-storied.

This building pattern continued in the 1980s, with a tendency towards the larger end of the size spectrum, until the vote for incorporation of the City of Malibu. After the vote in favor of incorporation, Malibu Park became the site of a building frenzy of very large homes (up

to 22,000 square feet), and large homes (typically 8,000 square feet, two-story) on smaller (less than one acre) lots. Many of these were built for speculation and having not sold in two years, were foreclosed. Some of the largest "mansions" have become "show places", frequently cited as examples of what should not happen in Malibu. This development brought forth the problem of excessive run-off water to Malibu Park, resulting in flooding of several homes in 1991 and 1992.

The rural character of the Malibu Park neighborhood is expressed by the low, ranch-style houses, the large lots, and the agricultural uses of the undeveloped land. It is also reflected in the virtual absence of sidewalks and curbs, and by the minimum use of street and home-security lighting.

A large parcel of land owned by the Santa Monica-Malibu (SM-M) School District is located in the center of the shelf area. The Juan Cabrillo Elementary School and the Malibu Park School (grades 7 through 12) are located on this land. The Malibu Methodist Church, which operates a nursery school, is located near the public schools.

Malibu Park contains three secondary trail heads to the SMMNRA at approximately the intersection of Guernsey and Morningview Drives (the Chumash Indian Trail), and at the north end of Busch and Bonsall Drives (the Zuma Ridge and Zuma Canyon Trails, respectively). Los Angeles County has leased a portion of the SM-M School District land for an Equestrian Center. This center is linked by roads and trail easements to the Chumash Trail from Morningview and Harvester Drives, to the Zuma Ridge trail head at Busch Drive, and the Zuma Canyon trail head at Bonsall Drive.

Zuma Beach receives several million visitors each year. To avoid the parking fee charged by the County at Zuma Beach, large numbers of beach goers park along PCH, and on Morningview and Guernsey Drives. Since circa 1990 these "parkers" have created a significant problem to the neighborhood in the form of obstruction of the roadsides used by equestrians and pedestrians, trash and litter, and an increasing number of burglaries and thefts.

Opossum, raccoon, skunk, squirrels, rabbits, gophers, rattlesnakes, roadrunners, quail, redtail hawks, owls, parrots and numerous smaller animals and songbirds are found through Malibu Park. These, and domestic animals, provide good hunting for coyotes, owls, and hawks. Deer were abundant in Malibu Park through the 1970s, but are only seen occasionally today. Bobcats and mountain lions from the hills to the north occasionally drop in for dinner.

10. WINDING WAY - DE BUTTS TERRACE

The area defined by Winding Way and De Butts Terrace north from Pacific Coast Highway to the Escondido Falls is a community of about 100 properties which are accessed by these private roads.

The majority of parcels are two to five acres in size, although parcels range from one-third to over 100 acres.

Lack of a county water supply had been a major obstacle to development in the area, and most of the parcels were undeveloped. When in recent years a water improvement district was formed, the property owners were assessed and a new water line and road improvements were accomplished. A five foot equestrian easement was dedicated alongside the road as a Coastal Commission condition of these improvements.

Much new construction took place, and consequently the homes are newer, larger, and taller (exceeding current standards) than those that exist in most communities, reflecting a change in the undeveloped character of the neighborhood.

The topography is that of rolling hills that provide an opportunity for unmatched ocean and coastline views. Although the feeling is rural, most homes are no longer oriented toward equestrian uses. Property values are higher than average for the land side communities of Malibu.

The roads are private, though not gated, which is consistent with the quiet residential character that the community has traditionally enjoyed. However, with the acquisition of land by the Conservancy (the Conservancy now owns approximately 30 acres of land in the area) has come the unlimited public access for hikers, bikers, campers and gangs. Security and liability have become a problem and the fire danger has increased. Recreationists and tourists park along the equestrian trail.

Two waterfalls exist in the upper region of Escondido Canyon which are accessible by hiking or horseback along trails through private property. There is conflict among the various types of users as to the impact on the sensitivity of this area as well as the residential character.

Of utmost importance to the continuance of the historic community character is the ability of the residents to control this recent increase in public access so that the integrity of the residential lifestyle can remain intact. The residents are adamantly opposed to the acquisition of any more property in the area by the Conservancy because of these problems and the increased public use of the area which is considered sensitive in nature, and which cannot support this increased level of use.

11. AREA INLAND OF PACIFIC COAST HIGHWAY WEST OF LUNITA/BAILARD TRACT TO WEST CITY LINE

This area's topography ranges from gently to steeply sloping terrain between Pacific Coast Highway and the Eastern boundary of the City. There is relatively sparse single-family development located on large lots usually served by private roads or driveways serving several properties. There is one semi-developed subdivision LaChusa Highlands, which exists around the mouth of Encinal Canyon Road and was initially sold to individual buyers in late 1959 by the Crummer family. The area is about 1/2 developed and subdivided lots

range from several sites of 1/2 acre to 3 acres in size. The roads are private and maintained by residents - many are dead-end and are intended to serve residents only. The neighborhood is very rural in appearance and lacks typical urban amenities such as sidewalks and streetlights. The area has a history of geological instability. There were several landslides closing Encinal Canyon Road in the late 1960's through 1980. These areas continue to be unstable. The development of structures in LaChusa Highlands was controlled by CCR's until they expired in 1986.

The general area affords wonderful views of the Pacific Ocean as well as the mountains and canyons from most existing and potential development sites. The areas not in the LaChusa subdivision are primarily larger parcels.

Existing housing development ranges from small, older, structures from 2,000 sq. ft. to recently built 8,500 sq. ft. structures. Most are, or appear to be multi-story. This often can be misleading in that the structure may only be 1 story at the level of the access road but is built down the slope and appears 2 or 3 stories high looking up from P.C.H.

Land uses in the area are almost all residential except for the Malibu Tennis and Riding Club at the western end which provides facilities for horse boarding, horse shows, and a tennis club which are clustered on the portions of the property fronting P.C.H. The upper steeper portions of the property provide trails for users of the facility. There also is a pet boarding kennel and a horse ranch which provides boarding and equestrian teaching facilities on two other properties nearby.

Historically, there have never been any multiple-family or commercial uses other than the Tennis and Riding Club which had a low-intensity recreational commercial land use designation under the Coastal Plan.

Other than some areas of geological instability, the primary hazard is from fire and high winds, which can be severe. The area has experienced several wildfires, one in 1978 burned 250 homes in western Malibu. Highway noise can be annoying for homes immediately uphill of P.C.H.

Water service to the area is provided by Waterworks District 29 but lateral lines are often inadequate to serve some areas. Electricity, cable TV and phone service is available in most of the area. Natural gas service is provided to some areas, not to others.

The closest shopping area is at Trancas Canyon Road and P.C.H. which is between 3 and 8 minutes by car from most properties. A medium size grocery chain market, a restaurant, a nursery and a full-service gas station are located there.

Two highways, Encinal Canyon Road which joins Kanan Dume Road, and Decker Canyon Road, a state highway, provide access from P.C.H. across the mountains to the Ventura Freeway.

The recreational opportunities available are primarily natural in nature and passive in use. There are 4 state owned beaches on the ocean side of P.C.H. across from this area. They are characterized by picnic and parking areas on the bluff with relatively primitive stairways to the natural beach below. They receive significant visitor use especially in the summer months creating parking hazards on P.C.H. which is a popular bike route. Several years ago a young man was killed crossing four lanes of P.C.H. from La Piedra Park near the intersection of P.C.H. and Encinal Canyon Road. Charmlee County park provides a magnificent natural hiking and picnicking area for residents and visitors. It is both within and without the City with an entrance beyond City limits off Encinal Canyon Road. The park runs through LaChusa Canyon between Encinal Canyon Road and Decker Canyon Road abutting National Park Service land which connects the park to La Pescadore Beach on the ocean side at Decker Canyon Road. The whole area has abundant wildlife including deer, coyote, hawks, buzzards, Monarch butterflies, etc.

12. MALIBU KNOLLS

The Malibu Knolls neighborhood consists of sixty-five residential parcels situated on a crescent shaped area above and surrounding the Civic Center Area. These lots form the northern and part of the western boundary of the Civic Center area. The average elevation of the neighborhood is approximately 200 feet above the flat land below. The neighborhood is separated by a deep gulch into two distinct areas - East Knolls (40 parcels), and West Knolls (25 parcels). The largest lot is over 4 acres and the smallest lot is less than 1/2 acre. The average lot size is 1.02 acres.

All of the homes front on dead-end streets, all of which can only be accessed from Malibu Canyon Road. During peak traffic hours, the residents are subjected to extreme traffic hazards by the high speed canyon traffic when entering or exiting the neighborhood. The East Knolls, in particular, has an intersection with Malibu Canyon Road at a blind curve on the canyon.

Most homes in Malibu Knolls have a unobstructed view of all of Santa Monica Bay from Palos Verdes to Santa Barbara Island. There is also an unobstructed view of the Malibu Civic Center. The physical terrain creates an amphitheater where the residents are the audience to the sights, sounds and any other activity that emanates now in the future from the Civic Center.

13. POINT DUME

The essential character of Point Dume is a predominance of single-family homes on lots that are extremely large for parcels on the ocean side of Pacific Coast Highway, together with views from those parcels of and/or proximity and access to the beach. Point Dume has a lack of sidewalks and street lights, as well as roads which are rarely straight or flat, all of which adds to the rural atmosphere prevalent on Point Dume. Many homes have ocean views and/or sounds or mountain views, and the surrounding beaches are both traditional Southern California wide, sandy beaches, such as Westward Beach, as well as more unique beaches, such as the "Big Dume" beach, with its extensive tide pools.

Original construction on Point Dume customarily consisted of single story ranch style homes in the 2,000 square foot range, with "building standard" type interior finishes. However, most homes constructed on Point Dume since approximately 1985 have been large, often finished in a opulent style, and with widely divergent styles, and such homes now constitute a significant (although not overwhelming) portion of the Point. Such larger homes are particularly prevalent on perimeter drives and bluff streets (e.g., Cliffside and Birdview), while original styles predominate elsewhere (e.g., Wandermere).

Although single-family residences predominate, a few multiple units structures were also build on Point Dume. Multiple unit structures and multiple structures on single lots were not part of the original neighborhood character or architecture, as still are not, nor have multiple unit structures been completed recently on Point Dume. Although multiple unit structures are rare on Point Dume, a significant number have recently been built in close proximity to Point Dume on the non-beach side of the Pacific Coast Highway, and the number of multiple unit structures in the area is therefore at a saturation point. Point Dume contains a mobile home park on the tip of the Point at the end of Heathercliff. Most of the lots on Point Dume have now been built out, though sporadic unimproved lots remain.

Shopping and related needs of Point Dume are area residents are assured, and seem assured in to the future, through two existing complexes on Point, Dume, one on either side of Heathercliff at the Heathercliff entrance to Point Dume. In addition, retail office space is also provided at Heathercliff, as well as at another complex off Portshead.

Passive and active recreational needs are met by the Malibu Community Center, which provides public access and parking off Fernhill, the Point Dume Headlands, (and associated foot trails), which provides public access and parking from Westward Beach.

As a result of the shopping and office centers and as a further result of "Z" traffic which does not commence or terminate on Point Dume, but which merely uses the Point as a short-cut, including but not limited to traffic leaving Westward Beach contrary to the designated traffic flow, the volume and speed of traffic on Point Dume is at an unacceptably high level.

Crime and potential fire hazards on the Point have also become concerns, particularly as non-residential development has increased, vagrancy has increased, itinerant workers have tends to congregate near Heathercliff and the PCH, and alcohol has been made available for both on-site and off-site consumption, including late into the night.

14. SERRA RETREAT

"Serra Retreat" is a wooded canyon area adjacent to Malibu Creek in Lower Malibu Canyon, as well as a portion of Sweetwater Mesa. The approximately 96 property owners of the small, secluded area belong to the Serra Canyon Property Owners Association, which was formed to maintain a protect the privately-owned, country road of the canyon community.

Serra Canyon consists of approximately 96 lots ranging from under ½ acre to 4 acres, with a few in excess of 4 acres. All but a handful are developed as single-family residences at this time. The homes range from small to large reflecting the diverse economic and architectural make-up of the special Malibu locale. Eighty-percent of the lots are one acre or less, with the remaining twenty percent more than one acre. As Malibu's historic ranch center, its rural character is unique and treasured.

15. MALIBU COUNTRY ESTATES

Malibu Country Estates is an enclave of single family homes north of Pacific Coast Highway and adjacent to the western border of the Pepperdine University campus. It consists of 107 lots of which five remain undeveloped. A "Declaration of Restrictions" recorded on August 28, 1972 in the County of Los Angeles and valid at least until January 1, 2010 defines the boundaries of each lot, whether it is for one or two story structures, and specifies a set of restrictions regarding height, setbacks, size of floor area, visual impact, etc.

Malibu Country Estates has paved streets, sidewalks, public water supply, storm sewers, street lights — the amenities and look of a suburban community. Its wastewater is treated at the recently upgraded Malibu Mesa Reclamation Plant, which is partly dedicated to meeting the fixed permanent needs of Malibu Country Estates. The Malibu Mesa Reclamation Plant is shared with Pepperdine University.

16. MALIBU ROAD

Malibu Road is a two-lane "country road" which runs north and south paralleling the Pacific Ocean for approximately 2-1/2 miles. Malibu Road has one entrance — Webb Way — which is a 100+-foot wide access road from Pacific Coast Highway (PCH). There is a large shopping center bordered by Webb Way, PCH, and Malibu Road. There are also professional offices at the entrance to Malibu Road. Since the enlargement of the shopping center, egress and ingress to Malibu Road has been hampered (some would say dangerous) due to the infrastructure's inability to handle the increased traffic.

There are over 250 living units situated on Malibu Road, the majority of which are two story single family homes located on the ocean side of the Road. These beach front lots are approximately sixty feet wide and one hundred feet deep. The land side residences are also mostly two story homes, but sit on larger lots ranging from 1/4 to four acres. At the far north end of Malibu Road there are several multi-family units which offer semi-affordable rental units.

The City of Malibu recently took over management of Bluffs Park, which is located on the palisades above Malibu Road. The park offers active recreational opportunities with a visitor's community center (The Michael Landon Center), a Little League field, and open recreational space popular with those who like to fly remote control planes or simply enjoy the spectacular ocean views as they wander the designated trails which wind down to Malibu Road.

The geological hazards on the land-side of Malibu Road are well known and have been the subject of on-going studies regarding the watering practices of Pepperdine University which is situated on the hills above the Road. It is believed that excess watering of the hills surrounding the University have contributed to the movement of the bluffs along the Road.

Malibu Road residents are served by an active homeowners association which represents their interests and concerns.

17. MALIBU CANYON VILLAGE HOMEOWNERS' ASSOCIATION, INC.; MAISON DE VILLE HOMEOWNERS ASSOCIATION; MALIBU PACIFICA CONDOMINIUM ASSOCIATION, INC.

Flanking the western-most section of the Malibu Civic Center "bowl" arena, and overlooking a slight hillside, stand three condominium properties --- Malibu Canyon Village, Maison de Ville and, tucked away beside a grade school and a Catholic church, Malibu Pacifica.

Bordered along their ocean side by Civic Center Way and the Maison de Ville sewage treatment plant, these three Malibu condominium properties contain 169 individual condominiums housing more than 400 residents on approximately 10 acres of real estate. Due in part to its proximity to Catholic and public schools, this area has become the most densely populated in Malibu. Each of the condominium properties as it exists today is fully developed and operating under condominium association covenants, conditions and restrictions.

With automobiles ricocheting up and down Civic Center Way at speeds often in excess of 60 miles per hour, condominium residents and the school children are subject to extreme traffic hazards when entering or leaving the neighborhood. Any consideration for further development of this area should take into account the existing traffic, population density, and the already overloaded sewage treatment plant.

18. ZUMA CANYON

Leaving Pacific Coast Highway and its profusion of fast, noisy cars and crowds of beach goers behind and entering Zuma Canyon, one can only marvel at the uncommon beauty and tranquility. Everywhere there are trees and flowers. The near-perfect silence is interrupted only by birds singing, crickets chirping, and the occasional hum of a distant mower.

What is almost unbelievable is traveling just a few hundred feet and being in such a pastoral setting, free of congestion, noise and visual disharmony. From the start, the visitor senses that Zuma Canyon is a rare and special place. There is immediately a feeling of having discovered a place unspoiled and undisturbed by civilization. Only upon a closer look does one become fully aware of the homes tucked behind a camouflage of thickset bougainvillea hedges colorfully lining the street.

Zuma Canyon property was originally settled with a population density of about one homestead per every five acres of land. Today, there are approximately fifty single-family building sites, each occupying an average of about three acres. Most have been developed in secluded estate-like settings.

From the vantage point of a western rim, one can observe a patchwork of small orchards, truck farms, stables and corrals stretching over the gently rolling terrain. There are groves of oranges and avocados, apple orchards, and greenhouses where rare varieties of orchids and nursery stock are grown. The unusual climatic conditions of Zuma Canyon are favorable to producing a wide variety of plants, fruits and vegetables.

Agriculture represents the only commercial enterprise permitted by RA-1 zoning in the Canyon, and it is an important source of livelihood and interest to more than a few of the canyon's property owners.

Zuma Canyon is located on the eastern side of Pacific Coast Highway along the stretch of Malibu between Kanan Dume Road to the south and Trancas Canyon to the north. At one end of the Canyon lie the Zuma wetlands and beach; at the other end is land currently designated as a National Park. There is no access to the beach from Zuma Canyon; there are no ocean views. Residential properties are nestled on a floodplain below steep slopes and rugged ridgelines.

Zuma Canyon is one of the least disturbed canyons of the Santa Monica Mountains, and it is considered a Significant Ecological Area. Its dry slopes and ridge are sparsely covered by a mixture of chaparral, coastal sage scrub and natural grasses. In contrast, the riparian bottom of the Canyon is dominated by narrow bands of dense native Oaks and Western Sycamore woodlands. Significant Watershed areas surround the woodlands.

Zuma Creek flows down the mountain and interior valleys towards the Pacific Ocean. The interaction between the ocean and streambed forms one of the last remaining wetlands along the Southern California coast.

The brushy, grassy habitat of Zuma Canyon provides a haven for a rich diversity of wildlife. Deer, bobcats, rabbits, raccoons, badgers and other species continue to be site in Zuma Canyon. The Canyon's canopy of trees and shrubs provide a sanctuary for many bird species, including trashers, quail and Golden Eagles. Members of the Audubon Society find Zuma Canyon a paradise for birdwatching activities. Historically, the high cliffs of Zuma Canyon provided a nesting habitat for the Peregrine Falcon, a State and Federally listed Endangered Species.

Describing the physical attributes of Zuma Canyon is much easier than defining the personality of its neighborhood. Even with access to an entire vocabulary it is difficult to find the proper words to express the quality of life existing in the Canyon. Many Zuma Canyon property owners are longtime residents who came to the Canyon seeking solitude and serenity. They, as well as newcomers to the Canyon, have chosen to retain those qualities. Over the years, the quiet, secluded, rural character of the Canyon environment

has remained virtually unchanged.

Several residents of the Canyon are now retired and appreciate more than ever the intimacy of canyon living. Others are professionals who work in the city but pay the price of lengthy commutes to return to a slower pace once their day's work is complete. Even non-residents enjoy the Canyon's ambience; riders regularly enjoy a ride through the Canyon.

A common denominator shared by Zuma Canyon property owners is a desire for privacy. This has brought about a feeling of closeness and community among the neighbors that's hard to find nowadays.

RECREATION
ELEMENT

OPEN SPACE 8

OPEN SPACE

RECREATION

RECREATION ELEMENT

ELEMENT

OPEN SPACE &
RECREATION
ELEMENT

**Open Space and Recreation Element
Table of Contents**

2.1	Introduction	2-1
2.1.1	Legislative Authorization	2-1
2.1.2	Purpose and Scope	2-1
2.2	Description of Existing Open Space	2-2
2.3	Description of Existing Recreation Facilities	2-3
2.3.1	City of Malibu Recreation Facilities	2-3
2.3.2	Los Angeles County Recreation Facilities	2-4
2.3.3	California Department of Parks and Recreation Facilities	2-6
2.3.4	Santa Monica Mountains Conservancy	2-6
2.3.5	National Park Service	2-7
2.3.6	Santa Monica/Malibu Unified School District Recreation Facilities	2-7
2.3.7	Point Dume Community Services District Facilities	2-8
2.3.8	Private Recreation Facilities	2-9
2.3.9	Trails	2-11
2.4	Opportunities and Constraints	2-14
2.5	Goals, Objectives, Policies and Implementation Policies	2-19
	Appendix A -- Inventory of Public Recreational Opportunities	2-32

2-1	Introduction
2-2	2.1.1 License and version
2-3	2.1.2 Feature list table
2-4	2.2 Database of testing cases
2-5	2.3 Database of 8 test scenarios (Table)
2-6	2.3.1 List of 8 test scenarios
2-7	2.3.2 List of 8 test scenarios (Table)
2-8	2.3.3 List of 8 test scenarios (Table)
2-9	2.3.4 List of 8 test scenarios (Table)
2-10	2.3.5 List of 8 test scenarios (Table)
2-11	2.3.6 List of 8 test scenarios (Table)
2-12	2.3.7 List of 8 test scenarios (Table)
2-13	2.3.8 List of 8 test scenarios (Table)
2-14	2.3.9 List of 8 test scenarios (Table)
2-15	2.3.10 List of 8 test scenarios (Table)
2-16	2.3.11 List of 8 test scenarios (Table)
2-17	2.3.12 List of 8 test scenarios (Table)
2-18	2.3.13 List of 8 test scenarios (Table)
2-19	2.3.14 List of 8 test scenarios (Table)
2-20	2.3.15 List of 8 test scenarios (Table)
2-21	2.3.16 List of 8 test scenarios (Table)
2-22	2.3.17 List of 8 test scenarios (Table)
2-23	2.3.18 List of 8 test scenarios (Table)
2-24	2.3.19 List of 8 test scenarios (Table)
2-25	2.3.20 List of 8 test scenarios (Table)
2-26	2.3.21 List of 8 test scenarios (Table)
2-27	2.3.22 List of 8 test scenarios (Table)
2-28	2.3.23 List of 8 test scenarios (Table)
2-29	2.3.24 List of 8 test scenarios (Table)
2-30	2.3.25 List of 8 test scenarios (Table)
2-31	2.3.26 List of 8 test scenarios (Table)
2-32	2.3.27 List of 8 test scenarios (Table)
2-33	2.3.28 List of 8 test scenarios (Table)
2-34	2.3.29 List of 8 test scenarios (Table)
2-35	2.3.30 List of 8 test scenarios (Table)
2-36	2.3.31 List of 8 test scenarios (Table)
2-37	2.3.32 List of 8 test scenarios (Table)
2-38	2.3.33 List of 8 test scenarios (Table)
2-39	2.3.34 List of 8 test scenarios (Table)
2-40	2.3.35 List of 8 test scenarios (Table)
2-41	2.3.36 List of 8 test scenarios (Table)
2-42	2.3.37 List of 8 test scenarios (Table)
2-43	2.3.38 List of 8 test scenarios (Table)
2-44	2.3.39 List of 8 test scenarios (Table)
2-45	2.3.40 List of 8 test scenarios (Table)
2-46	2.3.41 List of 8 test scenarios (Table)
2-47	2.3.42 List of 8 test scenarios (Table)
2-48	2.3.43 List of 8 test scenarios (Table)
2-49	2.3.44 List of 8 test scenarios (Table)
2-50	2.3.45 List of 8 test scenarios (Table)
2-51	2.3.46 List of 8 test scenarios (Table)
2-52	2.3.47 List of 8 test scenarios (Table)
2-53	2.3.48 List of 8 test scenarios (Table)
2-54	2.3.49 List of 8 test scenarios (Table)
2-55	2.3.50 List of 8 test scenarios (Table)
2-56	2.3.51 List of 8 test scenarios (Table)
2-57	2.3.52 List of 8 test scenarios (Table)
2-58	2.3.53 List of 8 test scenarios (Table)
2-59	2.3.54 List of 8 test scenarios (Table)
2-60	2.3.55 List of 8 test scenarios (Table)
2-61	2.3.56 List of 8 test scenarios (Table)
2-62	2.3.57 List of 8 test scenarios (Table)
2-63	2.3.58 List of 8 test scenarios (Table)
2-64	2.3.59 List of 8 test scenarios (Table)
2-65	2.3.60 List of 8 test scenarios (Table)
2-66	2.3.61 List of 8 test scenarios (Table)
2-67	2.3.62 List of 8 test scenarios (Table)
2-68	2.3.63 List of 8 test scenarios (Table)
2-69	2.3.64 List of 8 test scenarios (Table)
2-70	2.3.65 List of 8 test scenarios (Table)
2-71	2.3.66 List of 8 test scenarios (Table)
2-72	2.3.67 List of 8 test scenarios (Table)
2-73	2.3.68 List of 8 test scenarios (Table)
2-74	2.3.69 List of 8 test scenarios (Table)
2-75	2.3.70 List of 8 test scenarios (Table)
2-76	2.3.71 List of 8 test scenarios (Table)
2-77	2.3.72 List of 8 test scenarios (Table)
2-78	2.3.73 List of 8 test scenarios (Table)
2-79	2.3.74 List of 8 test scenarios (Table)
2-80	2.3.75 List of 8 test scenarios (Table)
2-81	2.3.76 List of 8 test scenarios (Table)
2-82	2.3.77 List of 8 test scenarios (Table)
2-83	2.3.78 List of 8 test scenarios (Table)
2-84	2.3.79 List of 8 test scenarios (Table)
2-85	2.3.80 List of 8 test scenarios (Table)
2-86	2.3.81 List of 8 test scenarios (Table)
2-87	2.3.82 List of 8 test scenarios (Table)
2-88	2.3.83 List of 8 test scenarios (Table)
2-89	2.3.84 List of 8 test scenarios (Table)
2-90	2.3.85 List of 8 test scenarios (Table)
2-91	2.3.86 List of 8 test scenarios (Table)
2-92	2.3.87 List of 8 test scenarios (Table)
2-93	2.3.88 List of 8 test scenarios (Table)
2-94	2.3.89 List of 8 test scenarios (Table)
2-95	2.3.90 List of 8 test scenarios (Table)
2-96	2.3.91 List of 8 test scenarios (Table)
2-97	2.3.92 List of 8 test scenarios (Table)
2-98	2.3.93 List of 8 test scenarios (Table)
2-99	2.3.94 List of 8 test scenarios (Table)
2-100	2.3.95 List of 8 test scenarios (Table)

2.1 Introduction

The following describes some of the key open space resources, opportunities and constraints facing the City of Malibu. A complete assessment of open space

resources is provided in the "Open Space Background Report" provided in the technical appendix to the Malibu General Plan.

2.1.1 Legislative Authorization

The State of California Government Code states that "the general plan shall include an open-space element as provided in Section 65302(e). "Open space land" is any parcel or area of land or water which is essentially unimproved and devoted to an open-space use and which is designated on a local, regional or state open-space plan as any of the following:

- Open space for the preservation of natural resources,
- Open space used for the managed production of resources;
- Open space for outdoor recreation, including areas of scenic, historic, and cultural value; airshed and;
- Open space for public health and safety including areas which require special management or regulation because of hazardous conditions such as earthquake fault zones or floodplains.

2.1.2 Purpose and Scope

The purpose of the Open Space and Recreation Element is to improve the overall quality of life for Malibu residents and visitors through the management of its natural resources and open space lands. The Open Space and Recreation Element deals with open space and recreation issues including outdoor recreation facilities and trails. The issues addressed in this element include the different aspects of the natural environment that contribute to an ecological balance.

The Malibu Open Space and Recreation Element is to be used as a guide for the maintenance of existing parkland, the acquisition and development of additional parks and recreational facilities, as well as vacant open land.

Several factors of special concern to Malibu residents addressed in this Open Space and Recreation Element include:

- The rapid development of open space continues to decrease the availability of parkland for future acquisition.
- Planning for acquisitions and improvements now can also provide for more cost effective purchases.

- State legislation permits local jurisdictions to require parkland dedication from developers if a parks and recreation element has been adopted which sets forth a rationale and standards for the dedication.
- The population increases which are projected as new development occurs will create a burden on existing parks.
- Malibu comprises the major portion of the coastal section of the Santa Monica Mountains National Recreation Area (SMMNRA). Enabling legislation for the SMMNRA mandates interagency cooperation to provide open space and recreational and cultural activities.

2.2 Description of Existing Open Space and Undeveloped Land

Undeveloped open space land is generally defined as areas that are not built upon and may include both manmade and natural landscapes and, as noted previously, includes any parcel or area of land or water which is

essentially unimproved or devoted to an open-space use and which is designated on a local, regional or state open-space plan. Open space can separate or unify urban functions or areas, depending on its form and location. In addition, open space provides opportunities for resource protection, enjoying scenic views, conservation of habitat and natural resources, outdoor recreation, public health and safety.

Open space within Malibu includes undeveloped land, parks, public and privately owned beaches, floodplain areas, earthquake areas, steep slopes, and all existing natural conservation areas.

Private Undeveloped Land: Vacant, undeveloped land dominates Malibu. There are 7,578.3 acres of vacant land which accounts for 60.4 percent of all land in the City. Most of the vacant land in Malibu is in a natural state, containing tree, brush, shrub, or grassland vegetation. Vacant land includes: natural park land; environmentally sensitive lands, beaches, undeveloped land which may be suitable for development, and abandoned agricultural land with limited improvements. Vacant beach areas include coastal beaches not associated with a national, state, county, or municipal beach park. In Malibu, this designation typically refers to private beaches. There are 113.3 acres of vacant/private beaches in the City. These beaches are located along the coast extending from the east end of the City (Las Tunas Beach) to the western boundary of the City including Las Flores, Carbon, La Costa, and Big Rock Beach areas, Malibu Colony, Point Dume, Broad Beach, Le Chuza Beach, and the Encinal beaches.

Public Open Space: Open space accounts for 14.9 percent of the total land in Malibu, making it the third most prevalent type of land use in Malibu. There are 1,869.9 acres of open space including regional and local parks, beach parks, and public open space used for recreation.

Local and regional parks make up 743.7 acres of the open space in Malibu. There is one local park in Malibu as defined by the Aerial Information Systems. Local parks are typically community parks or sports fields and their associated parking. Beach parks are not included in this designation. The 6.5 acre Malibu Community Center located on Point

Dume is considered the only neighborhood park; the Center is owned by the Santa Monica/Malibu Unified School District. Malibu Bluffs Park located at the mouth of Malibu Canyon which is approximately 8.7 acres includes playing fields and the Michael Landon Community Center. The second regional park in Malibu is the Malibu Lagoon State Park. The Malibu Lagoon State Beach, approximately 3.5 acres and located just east of the Civic Center at the mouth of Malibu Creek, also includes the Adamson House. The Malibu Bluffs Park is heavily used by local residents, so it is also considered a community park for recreation planning purposes. Beach parks and public open space used for recreation totaling 201 acres account for a large portion of the open space in Malibu. The City has several regional (City, county, state or federal) parks, including Charmlee Natural Area (formerly Charmlee Regional County Park) which is managed by the City of Malibu. This is a 524 acre site with small visitor/nature center and petting area with small animals. Hiking, picnicking, equestrian, nature trails and whale watching sites exists within the park.

Malibu Lagoon State Beach's facilities include fee and street parking, rest rooms, drinking water, hiking and nature trails, and disabled access. The lagoon contains important bird refuge supported by diverse marsh vegetation. The lagoon also supports steelhead trout and tidewater goby. Surfrider Beach is a widely recognized surfing area. The classic hollow peeling Malibu wave is one of Malibu's most significant natural resources formed by the cobble contours of the ocean floor.

2.3 Description of Existing Recreation Facilities

Malibu is located within the boundaries of the SMMNRA which extends from Griffith Park in the City of Los Angeles to Pt. Mugu in Ventura County and is comprised of City,

State, County, and Federally owned park lands and relies on cooperation between managing agencies and private land owners. Recreation areas are either publicly owned and operated by governmental agencies or are privately owned and operated, yet available to the public. Most recreation areas within the City of Malibu and its surrounding area are public beaches or mountain parks. The emphasis at these sites is on water oriented activities at beaches or on interpretation of the natural environment in the mountains. Figure OS-1 displays the existing public recreation facilities within and adjacent to the City of Malibu.

2.3.1 City of Malibu Recreation Facilities

Prior to the City's incorporation, park maintenance and recreational services were provided by the Los Angeles County Parks and Recreation and Harbors and Beaches Departments, the State Department of Parks and Recreation, the Santa Monica Mountains Conservancy, and the National Park Service. Since incorporation, the City Parks and Recreation Department manages the Equestrian Center, Charmlee Natural Area and Malibu Bluffs Park by agreement with L.A. County; and administers programs in these parks as well as other locations. Child development programs, summer camps, and special events are provided by private, organized groups. The Malibu Community Center, although a popular site for City-run meetings, is owned jointly by the Point Dume Community Services District composed of City residents along with the Santa Monica/Malibu Unified School District.

2.3.2 Los Angeles County Recreation Facilities

- Surfrider Beach is a part of Malibu Lagoon State Beach operated by Los Angeles County. Facilities on the site include fee and street parking, restrooms, drinking water, and disabled access. Surfrider Beach is a widely recognized surfing area. The classic hollow peeling Malibu wave is one of Malibu's most significant recreational resources, formed by the cobble contours of the ocean floor.
- Nicholas Canyon Beach has a rocky point and a long sandy beach located just west of Decker Canyon Road with scenic bluffs planned for park development. Facilities on site include fee and street parking, disabled access, rest rooms, showers, drinking water, and lifeguard stations. Point Zero located at this beach is also a favorite surfing location.
- Westward Beach is a part of Point Dume State Beach operated for the State by Los Angeles County. It is a long stretch of sandy beach located east of Point Dume. Facilities on the site include trail heads to bluffs above, fee parking, rest rooms, drinking water, lifeguard towers, and (Los Angeles County Metropolitan Transportation Authority (MTA) bus stop for line number 434. This beach is also another popular surfing spot.
- Zuma County Beach is LA County's largest sandy beach located just west of Point Dume, along Pacific Coast Highway. Facilities on site include fee and street parking (pay lot holds 2,122 cars), showers and eight rest rooms, disabled access, drinking water, 12 lifeguard towers, playground with volleyball courts, catamaran beach storage and children's play area, and two food concessions. Zuma Beach is the headquarters for the Northern Section Department of Beaches and Harbors Lifeguards. This beach provides yet another popular location for surfing. LAMTA bus route 434 also stops at Zuma Beach.

- The Sanjour Canyon Trail is a 1.5-mile loop located in a large, open area of the valley in Santa Canyon, just north of the Los Angeles County Fairgrounds and the Fairgrounds Center.
- The Sanjour Canyon Trail is a 1.5-mile loop located in a large, open area of the valley in Santa Canyon, just north of the Los Angeles County Fairgrounds and the Fairgrounds Center.

2.2.2 Sanjour Canyon Trail and Sanjour Canyon Park

The Sanjour Canyon Trail is a 1.5-mile loop located in a large, open area of the valley in Santa Canyon, just north of the Los Angeles County Fairgrounds and the Fairgrounds Center. The trail is a 1.5-mile loop located in a large, open area of the valley in Santa Canyon, just north of the Los Angeles County Fairgrounds and the Fairgrounds Center.

Insert Figure OS-1

- The Sanjour Canyon Trail is a 1.5-mile loop located in a large, open area of the valley in Santa Canyon, just north of the Los Angeles County Fairgrounds and the Fairgrounds Center. The trail is a 1.5-mile loop located in a large, open area of the valley in Santa Canyon, just north of the Los Angeles County Fairgrounds and the Fairgrounds Center.
- The Sanjour Canyon Trail is a 1.5-mile loop located in a large, open area of the valley in Santa Canyon, just north of the Los Angeles County Fairgrounds and the Fairgrounds Center. The trail is a 1.5-mile loop located in a large, open area of the valley in Santa Canyon, just north of the Los Angeles County Fairgrounds and the Fairgrounds Center.
- The Sanjour Canyon Trail is a 1.5-mile loop located in a large, open area of the valley in Santa Canyon, just north of the Los Angeles County Fairgrounds and the Fairgrounds Center. The trail is a 1.5-mile loop located in a large, open area of the valley in Santa Canyon, just north of the Los Angeles County Fairgrounds and the Fairgrounds Center.

2.2.4 Sanjour Canyon Trail and Sanjour Canyon Park

The Sanjour Canyon Trail is a 1.5-mile loop located in a large, open area of the valley in Santa Canyon, just north of the Los Angeles County Fairgrounds and the Fairgrounds Center. The trail is a 1.5-mile loop located in a large, open area of the valley in Santa Canyon, just north of the Los Angeles County Fairgrounds and the Fairgrounds Center.

The Sanjour Canyon Trail is a 1.5-mile loop located in a large, open area of the valley in Santa Canyon, just north of the Los Angeles County Fairgrounds and the Fairgrounds Center. The trail is a 1.5-mile loop located in a large, open area of the valley in Santa Canyon, just north of the Los Angeles County Fairgrounds and the Fairgrounds Center.

- Dan Blocker State Beach, also known as Corral Beach, is a long, sandy beach at the mouth of Corral Canyon. It is operated by Los Angeles County for the State and has lifeguard towers.
- Las Tunas State Beach is another State beach operated by Los Angeles County. It is located at the mouth of Tuna Canyon and has no developed facilities.

2.3.3 California Department of Parks and Recreation Facilities

The California Department of Parks and Recreation is responsible for the Malibu Lagoon State Beach including Malibu Pier (in conjunction with private contract), and Surfrider Beach (in conjunction with the L.A. County Department of Beaches and Harbors), Point Dume State Beach, Malibu Creek State Park, and Robert H. Meyer Memorial State Beach.

- Malibu Pier is a 720 foot long historical landmark with twin blue towers including restaurants, bait and tackle shops, a snack bar, rest rooms, fee and street parking, and MTA bus line number 434. The Malibu Pier is a portion of Malibu Lagoon State Beach.
- Point Dume State Beach is a 30-acre site that contains the Point Dume Natural Preserve and is designated as an area of special biological significance. The site contains 200-foot sandy bluffs, giant coreopsis, Dudleya caespitosa and tidepools, offshore reefs and kelp bed, habitat for seal and marine fowl. Facilities on site include stair access to the beach, fee parking from Westward Beach Road, and whale watching sites.
- Robert H. Meyer Memorial State Beach is comprised of the El Pescador, La Piedra, and El Matador beaches located along Pacific Coast Highway on the west end of the City. These beaches have stairway access, fee and street parking, portable rest rooms, and drinking water and occasional lifeguard service. This site contains some tidepools. Giant coreopsis flourish as well as loon and cormorant nests, scenic rock formations, and tall bluffs.

2.3.4 Santa Monica Mountains Conservancy

Corral Canyon Park is approximately 16.1 acres and is located on the Pacific Coast Highway between Puerco Canyon and Corral Canyon. The park, managed by the Santa Monica Mountains Conservancy, provides hiking, equestrian trails, and parking.

Solstice Canyon Park is located at Pacific Coast Highway and Corral Canyon Road. The site is approximately 556 acres and provides hiking and equestrian trails, mountain biking, picnicking, grills, camping, swimming, disabled access, parking, drinking water, rest rooms, and access to the Backbone Trail. The Park is managed by the National Park Service.

2.3.5 National Park Service

The National Park Service is responsible for the Santa Monica Mountains National Recreation Area. The entire City of Malibu is within the Santa Monica Mountain National Recreation Area, a federal designation. The legislation of Public Law 95-625 mandates the National Park Service to manage the recreation area in a manner which will preserve and enhance scenic, natural and cultural resources, and its public health value as an air-shed, and provide recreational and educational opportunities. The National Park Service is committed to cooperative working together with agencies and jurisdictions to create a system of land use, recreational and educational opportunities, and resources conservation and preservation.

- The Santa Monica Mountains National Recreation Area (SMMNRA) was established by Congress in 1978. The National Park Service has developed multiple-use policies for managing the area and aspires to acquire those lands which offer significant natural, cultural, and recreational resources and which are not already under governmental jurisdiction or private preservation/recreation-oriented use. People will continue to live and work within the boundary of the recreation area, these people are not considered "in-holders, to be removed one day, in the traditional park sense, but "neighbors." Regulation of their land use is not the responsibility of the federal government but of local jurisdictions.

The City of Malibu lies within the boundaries of the SMMNRA. The National Park Service is committed to cooperation with the City of Malibu to preserve Malibu's natural and cultural resources, watershed, and open space.

Zuma and Trancas Canyons are an important part of the SMMNRA together make up one of the largest contiguous land holding in the mountains. The lower canyons are within the City of Malibu. The National Park Service owns over 5,700 acres of this unique example of a Mediterranean ecosystem, which provide core wildlife habitat. Streams help support wildlife including reptiles, birds, deer, coyote, bobcat, and mountain lion. Several plant communities are represented: chaparral , coastal sage scrub, riparian/oak woodland, and grassland. Several sensitive plant species are found in the canyons, such as Santa Susana tarweed, Hoover's baccharis, Santa Monica live-forever, and the State and federally listed *Pentochaeta lyonii*. The steep rugged canyons of natural beauty and tranquility provide visitors with a variety of recreational opportunities, including hiking, equestrian, and mountain bike trails, or resplendent contemplation.

2.3.6 Santa Monica/Malibu Unified School District Recreation Facilities

The Santa Monica/Malibu Unified School District (SMMUSD) operates three facilities within the City of Malibu. Those schools within the City of Malibu include Cabrillo Elementary School, Webster Elementary School, and Malibu High School. These school provide recreational facilities and classrooms that may be used by local residents. In addition to school recreational facilities, the SMMUSD leases its Point

Dume Elementary School to the Point Dume Community Service District for a Community Center. The school district was also leasing property adjacent to the existing Malibu High School to Los Angeles County for operation of the equestrian center. The County is currently transferring the lease on this property to the City.

- Cabrillo Elementary is located at 30227 Morningview Drive and serves grades K-5. Recreation facilities on-site include basketball courts, a blacktop, and a small grassy area. The school facilities are open to the public for use outside of regular school hours.
- Malibu High School is located at 30215 Morningview Drive, adjacent to Cabrillo Elementary and just northwest of Point Dume. The school currently serves grades six through nine and will continue to add a grade for the next three years resulting in the service of grades six through 12 by the year 1995. The school site is approximately 49 acres. The SMMUSD leases approximately 20 of those acres (for one dollar a year) to the City (the lease is being transferred from the County in 1993) for the Malibu Equestrian Center. Recreational facilities on-site include one swimming pool that has been void of water for several years, a track, an auditorium, 1 baseball field, 2 tennis courts, 15 outdoor basketball courts, a gym with one indoor basketball/volleyball court, and 1 football/soccer field. All fields and courts are open to the public and organized groups upon permit. The City has a shared-use agreement to organize and administer summer recreation programs as well as weekend and after-school programs at the school.
- Webster Elementary School is located at 3602 Winter Canyon and serves Kindergarten through grade five. The school provides an auditorium with a 350-person capacity, classrooms, playground with child play equipment and rest rooms. The school site is approximately three acres. The existing ball fields and grassy playground need upgrading.

2.3.7 Point Dume Community Services District Facilities

The Malibu Community Center, located at 6955 Fernhill Road, is a 27,000 square foot former school on 6.5 acres, with meeting room capacity from 12 to 200. There are 850 square foot rooms for lease, as well as smaller and larger rooms available on an hourly basis. Recreational facilities on site include a grassy park with children play equipment, picnic tables, basketball courts, volleyball court, tennis backboard, parking, and rest rooms.

Recreation programs for the residents are currently provided by the Point Dume Community Services District, and private groups and include youth and adult sports programs, senior citizen activities, and special interest programs. Youth sports programs include such activities as basketball, soccer, football, and baseball. Various adult sports programs include softball and tennis. Senior citizen activities include special monthly programs, travel tips, weekly book study group, and exercise program. Special interest programs include numerous classes such as tap and jazz dancing, aerobics, martial arts, yoga, gymnastics, day camps, and after school child-

care. Indoor recreation facilities used for the various programs include the Malibu Community Center (on Fernhill Drive in Point Dume), the Malibu Bluffs Park located on Pacific Coast Highway, the Michael Landon Community Center located at Malibu Bluffs Park, and the Malibu Lagoon State Beach area.

2.3.8 Private Recreation Facilities

Private recreation consists of privately owned facilities which generally require some form of membership or residence. Boating, tennis, and riding clubs exist throughout the City. Beach clubs encompass beaches for private use by members. In addition, there are a number of privately owned camps which include hiking, camping, picnicking, and other outdoor recreational opportunities. Among these are: Calamigos Star C Ranch Camp; Jewish Centers Association; Bloomfield Foundation for the Junior Blind; and Salvation Army. Other private recreation facilities include the Malibu Tennis Club and the Malibu Riding and Tennis Club.

Organized groups in Malibu that currently provide recreational opportunities include the Malibu Recreational Council, soccer associations, baseball leagues, softball leagues, football leagues, equestrian clubs, senior citizen groups, and religious groups.

Commercial recreation developments or facilities also serve public recreational needs. Sailing, surfing, windsurfing, and scuba instruction and equipment rentals are available at locations in the Malibu Pier area. Other commercial recreation activities include chartered boats, fishing, and horseback riding.

Visitor-serving facilities are defined to include private and public developments that provide accommodations, food and commercial-recreation developments, such as shopping, eating and amusement areas for tourists. One recreational vehicle (RV) park is located in Malibu near Malibu Beach: the Malibu RV Park.

**TABLE 2-1:
SUMMARY OF EXISTING PARKLAND RECREATION FACILITIES**

Name and Agency	Location	Description
Charmlee Natural Area (City of Malibu) ¹	2577 S. Encinal Canyon Road	Hiking, equestrian, nature and mountain bike trails; visitor/nature center; disabled access; parking; drinking water; rest rooms; backbone trail access; whale watching; astronomy programs
Corral Canyon Park (SMMC) ²	Pacific Coast Highway between Puerco Canyon and Corral Canyon	Hiking and equestrian trails and parking
Corral State Beach (LACBH/CDH) ³	26000 Block on Pacific Coast Highway	Swimming, parking, drinking water, rest rooms, lifeguard, and bus stop
Dan Blocker State Beach (LACBH)	26224 Pacific Coast Highway	Swimming, parking, drinking water, and rest rooms
El Matador Beach (CDPR) ⁴	32350 Pacific Coast Highway	Swimming, parking, drinking water, rest rooms, scenic rock formations, and tidepools.
El Pescador Beach (CDPR)	32900 Pacific Coast Highway	Swimming, parking, drinking water, rest rooms, scenic rock formations, and tidepools.
La Piedra State Beach (CDPR)	32000 Block on Pacific Coast Highway	Swimming, parking, drinking water, stair access, rest rooms, scenic rock formations, and tidepools.
Las Tunas State Beach (LACBH/CDH)	Pacific Coast Highway between Big Rock Drive and Tuna Canyon Road	Swimming, parking, drinking water, bus stop, lifeguard, and rest rooms.
Malibu Bluffs (LACPR/City of Malibu)	Pacific Coast Highway at Malibu Canyon Road	Hiking trails, picnicking, baseball fields, soccer field, jogging track, par course, parking, drinking water, rest rooms, and dogs permitted
Malibu Community Center (SMMUSD/PDCSD) ⁵	6955 Fernhill Drive	Leasable rooms, play equipment, picnic tables, basketball courts, volleyball courts, tennis backboard, parking, rest rooms, senior center, auditorium, and nursery school.
Malibu Lagoon State Beach/Surfrider Beach (CDPR and LACBH)	23200 Pacific Coast Highway	Hiking and nature trails, picnicking, swimming, visitor/nature center, disabled access, drinking water, rest rooms, and historical sites.
Malibu Lagoon State Park (CDPR)	23200 Pacific Coast Highway	swimming, surfing, drinking water, parking and rest rooms.
Nicholas Canyon Co. Beach (LACBH)	33900 Pacific Coast Highway	Swimming, surfing, disabled access, drinking water, parking, and rest rooms.
Point Dume State Beach (CDPR)	Point Dume Area	Swimming, surfing, whale watching, nature tours and trails, parking, and stair access.
Solstice Canyon (SMMC)	Pacific Coast Highway to Corral Canyon Rd.	Hiking and equestrian trails, picnicking, visitor/nature center, disabled access, parking, drinking water, rest rooms, dogs, and historical sites.
Westward /Point Dume Beach (LACBH)	Pacific Coast Highway to South end of Westward Beach Road	Hiking trails, swimming, parking, drinking water, and rest rooms.
Zuma County Beach (LACBH)	30050 Pacific Coast Highway west of Kanan Road	Swimming, surfing, disabled access, parking, drinking water, rest rooms, volleyball nets, showers, Northern Section Department of Beaches and Harbors Lifeguards.
Zuma/Trancas Canyon Park (NPS) ⁶	End of Busch Dr. north of Pacific Coast Highway	Hiking and equestrian trails, mountain bikes, parking, and dogs.

Source: Harland Bartholomew and Associates, Inc., 1992

¹ Los Angeles County of Parks and Recreation (LACPR)

² Santa Monica Mountains Conservancy (SMMC)

³ Los Angeles County Beaches and Harbors (LACBH)/California Department of Highways

⁴ California Department of Parks and Recreation (CDPR)

⁵ Santa Monica/Malibu Unified School District (SMMUSD)/Point Dume Community Services District

⁶ National Park Service (NPS)

**TABLE 2-2:
SUMMARY OF EXISTING SCHOOL RECREATIONAL FACILITIES**

School Name and Agency	Location	Description
Cabrillo Elementary School (SMMUSD)*	30227 Morningview Drive	Blacktop, small grassy area. Facilities open during school hours, but locked evenings and weekends.
Malibu Middle/High School (SMMUSD)	30215 Morningview Drive	One swimming pool, 1 baseball diamond, 2 tennis courts, 15 outdoor basketball courts, auditorium, track, gym with indoor basketball/volleyball court, 1 football/soccer field. All fields and courts are open to the public and organized groups upon permit. The City began sharing operation of the School in January, 1994.
Webster Elementary School (SMMUSD)	3602 Winter Canyon	One auditorium with a 350-person capacity, classrooms, playground with children's play equipment and rest rooms. The existing ball fields and grassy playground need upgrading.

Source: Harland Bartholomew and Associates, Inc., 1992

* Santa Monica/Malibu Unified School District

2.3.9 Trails

The Santa Monica Mountains Trail Council (SMMTC) works with many agencies, organizations, companies, and individuals to organize trail projects, coordinate volunteer trail maintenance, support acquisitions of public land for trails, and promote public awareness and use of trails. Their greatest accomplishment has been the adoption of their Comprehensive Trail Plan by Los Angeles County as part of their General Plan, which includes 23 proposed trail routes. The County now works with landowners to preserve easements along the adopted trails. The SMMTC plans to work with Ventura County in a similar manner in the future.

Figure OS-2 depicts the existing and proposed trails in and adjacent to the City of Malibu, which are listed in the Comprehensive Trail Plan. Conceptually, there are three major components to the trails system, including the Backbone Trail, which traverses the coastal zone from the City of Los Angeles to Ventura County, a series of lateral trails which provide north-south access linking the Backbone Trail and coastal areas, and a series of connector trails. Once ultimately completed, the trail system is intended to: (a) provide an integrated network of trail corridors linking recreational facilities and public land to population centers; (b) provide a functional linkage between coastal and mountain areas; (c) facilitate access to significant physiographic and ecologic features; (d) establish connections with the regional trail network; and (e) maximize safe opportunities for hiking and equestrian use.

The Backbone Trail is being completed in segments by the SMMTC. When it is complete, it will extend approximately 55 miles, linking the major parklands throughout the mountains and the City. While Figure OS-2 only depicts proposed trails, there are smaller additional trails located within each park in the vicinity of the City of Malibu which provide opportunities for exploration. Hiking guides and maps are available at major park information centers.

Ten out of the 23 proposed trails are located within the City limits. They are as follows:

- **Coastal Slope Trail.** The Coastal Slope Trail would connect Leo Carrillo State Beach and Charmlee Regional Park with the Backbone Trail near Saddle Peak. The trail would traverse several scenic canyons with ocean views throughout. The trail intersects with several coastal canyon trails.
- **Corral Canyon Trail.** This trail runs through Corral Canyon and would connect to the Coastal Slope Trail as well as the Solstice Canyon Trail. This trail would also connect Corral Canyon State Beach to Malibu Creek State Park.
- **Escondido Falls Trail.** This trail would connect the Coastal Slope Trail with Escondido Falls.
- **Malibu Creek Trail.** This trail which would intersect with the Backbone Trail at Tapia County Park and with the Coastal Slope Trail, would connect the mountain parks with the Malibu Lagoon State Beach. Significant features along the path of the trail would include scenic canyon walls with rock outcroppings and the riparian habitat. The Malibu Creek Trail would be designated for hiking only.
- **Paradise Cove Trail.** This trail would connect Paradise Cove along the coast with the Zuma Ridge, Ramirez Canyon, and via the Coastal Slope Trail, the Escondido Falls Trails.
- **Ramirez Canyon Lateral and Connector Trail.** This trail would run along a ridge between Ramirez and Escondido Canyons connecting the Coastal Slope Trail with National Park Service property in Ramirez Canyon.
- **Solstice Canyon Trail.** This trail would intersect with the Backbone and Coastal Slope Trails, provide a link between Malibu Creek State Park and the ocean. The trail route descends from north to south along the mid coastal slope, passes through a riparian corridor, and provides significant ocean views.
- **Three Park Trail.** This trail would connect the Backbone Trail with Encinal Canyon Road and Charmlee Park and continue down to the Pacific Ocean. The proposed trail would also run along the spurs of Los Alisos Canyon, providing the hiker with ocean views.
- **Trancas Canyon Lateral Trail.** This trail would connect the Backbone Trail with the Pacific Coast Highway and Zuma Beach, providing a link between the mountains and the ocean. The trail would run along the midslope of Trancas Canyon overlooking the ocean and riparian area.

**Insert
Figure OS-2**

Figure OS-2

- Zuma Ridge Trail. This trail would be a main north-south cross mountain trail and would intersect with the Backbone Trail and five lateral trails. The trail would connect Zuma Canyon Park, the proposed Ramirez Canyon Park, Zuma Beach, and the Calabasas Landfill which is to be the site of a future regional park. The trail would traverse the Zuma Canyon Significant Watershed.

Peak uses of the majority of recreation facilities, in and adjacent to Malibu, occur between the months of April and September. During peak use periods, maximum capacity is generally reached at the beaches. Maximum capacity is defined as having been reached when the parking lot(s) serving the beach(es) are full.

In addition to the trails proposed in the Comprehensive Trail Plan, many trails and trail fragments have been dedicated and proposed throughout the City. Some of these trails are in use. Other trails which are in use have never been recorded. The resultant confusion has created some controversy concerning which trails should be included in a comprehensive trails and access plan for the City.

The Open Space Sub-Committee of the General Plan Task Force and the a local trail committee have researched dedications for trails and trails easements. Many of these trail dedications appear to be part of roadway rights-of-way. Others provide important links among existing trails and access to the local beaches.

Local homeowners associations provided documentation that several of the dedicated trails were held in common by the associations and not open to the general public. All roadways in Malibu may be considered a source of trails right-of-way, but must be inspected to ensure there is an unobstructed right-of-way width adequate to safely accommodate pedestrians and, as appropriate, equestrians. The trails dedication information is provided by the Open Space Sub-Committee of the General Plan Task Force as part of the Goals, Objectives and Policies of the General Plan. When title and physical adequacy have been verified, the information will be a useful tool in development of a comprehensive trails plan for the City on an area-by-area basis after which, unnecessary easements can be retired.

2.4 Opportunities and Constraints

The preservation of open space is constrained by the rising property values and strong development pressures that cause rapid development. Rapid development may adversely affect the preservation of open space and visual resources, proceeding before adequate studies can be done.

Piecemeal development can contribute to the lack of a unified open space system in the Malibu area. Open space provided by individual developments tends to be small, and often does not relate to neighboring parks, trails, ridgelines, habitat linkages or other open space areas.

The National Recreation and Parks Association (NRPA) has set standards for the number, size, and type of parks and recreation facilities required to adequately serve a given community. By these standards, the City of Malibu is currently experiencing a shortage of such facilities. Future population growth will further increase recreational needs and impact the existing facilities.

In order to meet the future needs of Malibu residents, several types of recreational facilities, ranging from small tot lots and "vest pocket" parks to larger park facilities will be needed. Basic criteria for the provision of public parks and specialized recreation facilities are shown in Tables 2-3 and 2-4.

Neighborhood parks normally serve a neighborhood population within a 1/4 to 1/2 mile radius. Generally, these parks are set aside for passive recreation such as walking and relaxation. The park normally requires five to fifteen acres; however, the size may vary depending on the size of the neighborhood and the proximity to a community park.

These constraints are balanced by numerous opportunities available to the City. Some of these opportunities include the availability of state and federal funds. In the past few years, voters have approved several bond issues for the acquisition of parks and recreational facilities. In addition, because large portions of the hillsides and mountains in and around the City have very steep slopes that are not suitable for development, many of these areas are potential candidates for future acquisitions. The Santa Monica Mountains Conservancy, the Mountain Restoration Trust, the California Department of Parks and Recreation and the National Park Service all have plans for future parkland acquisition. In addition, other parks may be developed through donations of land (such as the recent donation by Barbra Streisand of property to the Santa Monica Mountains Conservancy).

The Land Use Element and Housing Element of this General Plan project a population of 14,254 and 6,220 dwelling units in the year 2010.

**TABLE 2-3
CRITERIA FOR PROVISION OF PUBLIC PARKS AND PRIVATE RECREATIONAL
FACILITIES**

Classification	Acres/1000 Population	Size Range	Population Served	Service Area
Play Lots	N/A	2,500 ft ² - 1.0 acre	500-2,500	Sub- neighborhood
Vest Pocket Parks	N/A	2,500 ft ² - 1.0 acre	500-2,500	Sub- neighborhood
Neighborhood Parks	2.5 acres	Min. 5.0 acres - 20.0 acres	2,000-10,000	1/4 to 1/2 mile
Community Parks	2.5 acres	20.0 acres - 100.0 acres	10,000-50,000	Within 20 minutes driving time
Regional Parks	20.0 acres	250 acres and higher	Serves entire pop. in smaller communities	Within 1 hour driving
Source: National Recreation and Parks Association				
* Regional park facilities are provided by the Santa Monica Mountain Conservancy, LA County Parks and Recreation Department, the State of California Parks Department, and the National Park Service.				

**TABLE 2-4:
STANDARDS FOR SPECIALIZED FACILITIES**

Facility	Standard No. of Facilities per Resident	Standard for Malibu*	Provided in Malibu**	Comment
Baseball Diamonds	1/6,000	2-3	4	Regulation 90 feet
Softball Diamonds and/or youth ball fields	1/3,000	4-5	12	
Tennis Courts	1/2,000	6-8	2	Best in groups of 4
Basketball Courts	1/500	22-32	18	
Swimming Pools (public)	1/10,000	1-2	1 (Closed)	
Outdoor Theaters (non-commercial)	1/20,000	1	-0-	
Golf Courses	1/25,000	1	1 (Par)	
Source: National Recreation and Parks Association				
* Low number indicates facility level appropriate to current population, high number indicates facility level appropriate to projected 2010 population.				
** Estimated number of facilities provided including those at City schools.				

Community parks provide for a variety of active recreational opportunities such as outdoor organized sports and passive services for all age groups. Such activities normally require more space than a neighborhood park, and are typically designed to serve a population of 20,000 to 30,000. The suggested size requires an area of 15 to 20 acres with at least 2/3 of the area developed for active recreation purposes. Beaches are not designated under this category.

Based on the NRPA standards, and a 1990 Census-estimated population of 11,116, the City should have approximately 27.8 acres of neighborhood parks, 27.8 acres of community parks, and 222 acres of regional parks; based on the projected population of 14,254 in the year 2010, the City should have 35 acres of neighborhood parks, 35 acres of community parks, and 280 acres of regional parks. Currently, Malibu has 1,869.9 acres of dedicated open space which is substantially more than is currently needed or be projected to be needed. Many of these parks serve more than one function. Neighborhood park needs may be met by all of the parks, because all may be used for walking and relaxation. Malibu Bluffs Park is a regional park, but offers community park facilities. There are thousands of additional acres of county, state, and national parkland located outside City limits. Most of these parklands are within hiking distance, or accessible in minutes by car. These parklands are open to the public and are used regularly by Malibu residents. It can be assumed that these parklands could satisfy the regional park requirements for the City.

Deficiencies may be found in the distribution of developed recreational facilities. The City has only 15.2 acres of community park, the Malibu Community Center and part of Malibu Bluffs Park, resulting in a deficiency of about 12.6 acres of community parks. The remainder of the community is without easy access to these types of recreational facilities, except as residents they may access facilities common to their private residential communities or the private clubs to which they may belong. These needs may appropriately be met with Play Lots and Vest Pocket Parks throughout the community.

In addition to parkland requirements, there are NRPA standards for specialized facilities (see Table 2-4). Based on the current Malibu population, a minimum of two baseball fields, four softball diamonds or youth ball fields, six tennis courts, 22 basketball courts, one outdoor theater and one swimming pool should be provided by the City for its residents. The maximum range on Table 2-4 indicates the standard which should be met if the City population increases according to projections developed for the General Plan. Assuming the swimming pool at Malibu Middle/High School is repaired, the remaining current to projected needs include one swimming pool, four to six tennis courts, and four to 14 basketball courts. It may be argued that the auditorium at the Malibu Community Center serves community needs for theater space which if met by an outdoor theater would not conform to the City goal of reducing the community noise level.

Also, as noted in the NRPA standards, in smaller communities, regional parks may serve the entire population. This is true for Malibu, however, the City is experiencing pressures related to privacy issues in parks for residents. Some of the pressures may be relieved by opening school playgrounds to the public, or by City acquisition of

small parcels of vacant infill parcels to develop as small neighborhood pocket parks. There are many acres of vacant land available for small park facilities. Despite the lack of smaller local parks, the large number of regional parks does alleviate some of the pressures for outdoor activities. In addition, there are several acres of beach land located throughout the City that are used by the residents of the community and visitors as well.

Although the City's limited financial resources may restrict its ability to purchase land for open space preservation and parks and recreation needs, grants and state or federal funds may be available to the City. City funds are more likely to be spent first on high priority items, such as providing infrastructure and public services to residents. In addition to limited funds available for the purchase of land and facilities for park and recreation programs, rising park development and maintenance costs have curtailed parkland expansions in recent years. Even if parkland can be acquired, the costs of developing and operating the park facilities can be prohibitive.

Existing trails within the City limits may be a constraint to homeowners. Unmarked trails appear on private residential properties. Due to the proposed trail systems adoption prior to City incorporation, the system reflects the L.A. County Parks and Recreation Department, the Santa Monica Mountains Conservancy, and the National Park Service ideas and desires. There is a lack of cohesiveness with the trail system and the existing structures and property owners in Malibu. A revised trail map reflecting the needs of the City along with other responsible and interested agencies should be created in the near future.

The proposed trail system, while providing the opportunity to link regional and local parks and cities, would also result in more foot and vehicular traffic through residential neighborhoods. Trails extending through or adjacent to private homes will reduce privacy for most affected homeowners. Hikers normally drive to Malibu and park before starting on the trails. Adequate parking facilities at trail heads should be provided.

2.5 Goals, Objectives, Policies and Implementation Measures

OS GOAL 1: AN ABUNDANCE OF OPEN SPACE CONTRIBUTING TO A RURAL, NATURAL ENVIRONMENT CONSISTENT WITH THIS OPEN SPACE MANAGEMENT PLAN.

OS OBJECTIVE 1.1: Ample and diverse public parkland and open space, integrated by circulatory and visual links, to create a rural, open feeling.

OS Policy 1.1.1: The City shall encourage acquisition and dedication of appropriate land into parks.

OS Policy 1.1.2.: The City shall pursue all appropriate site acquisition, maintenance and program funding opportunities.

OS Policy 1.1.3: The City shall preserve, protect, and enhance the character and visual quality of natural open space as a scenic resource of great value and importance to the quality of life of residents and to the enhancement of the scenic experience of visitors.

To implement these policies the City shall:

OS Implementation Measure 1: Work with other agencies to develop an Open Space Acquisition Program that includes detailed scientific studies of land characteristics to determine suitability, possible multiple-uses of areas and the environmental impact of proposed acquisition.

OS Implementation Measure 2: Actively seek donations and grants, and when economically feasible fund, purchases of beach access easements and inland and shoreline properties for open space and recreational uses.

OS Implementation Measure 3: Support acquisition by public agencies and private conservancies of properties appropriate for parks.

OS Implementation Measure 4: Create a land trust program that accepts donations of land and preserves it for open space including a system of incentives for donations of land.

OS Implementation Measure 5: Evaluate all opportunities to purchase vacant Santa Monica-Malibu Unified School District or tax delinquent properties located in Malibu for neighborhood or community park use.

OS Implementation Measure 6: Require property owners to mitigate the impact of development on parkland and open space through dedications of land or payment of in-lieu fees.

OS Implementation Measure 7: Develop incentives to encourage owners of contiguous legal lots to consolidate the lots into larger, single holdings.

OS Implementation Measure 8: Notify the National Park Service of proposed developments outside existing developed areas.

OS OBJECTIVE 1.2: Portions of privately owned parcels remain as natural open space.

OS Policy 1.2.1: The City shall encourage dedication and maintenance of private open space to preserve Malibu's natural and rural character.

OS Policy 1.2.2: The City shall encourage clustering of development to preserve large, unbroken blocks of open space where clustering can be accomplished without creating urban development patterns in rural areas.

OS Policy 1.2.3: The City shall require development to link and integrate open space visually and link open space to activity centers, other open spaces and scenic routes through a system of trails.

OS Policy 1.2.4: The City shall work cooperatively with schools to stretch the tax dollars through joint use of areas and facilities and co-sponsorship of programs and special events.

To implement these policies the City shall:

OS Implementation Measure 9: Develop and implement a program/system of incentives to encourage voluntary dedication and maintenance of natural open space areas. Incentives may include (a) reduced setbacks, (b) increased grading and © increased structure size.

OS Implementation Measure 10: Regulate construction activities to eliminate potentially destructive practices that remove topsoil or dump soils in areas intended to be preserved as open space.

OS Implementation Measure 11: Develop and implement a transfer development credit program resulting in permanent open space. This program shall provide incentives to retire otherwise developable parcels that are geologically unstable, in floodways or are otherwise environmentally sensitive.

OS OBJECTIVE 1.3: Open space that compliments the City's health and safety policies.

OS Policy 1.3.1: The City shall favor the dedication of open space where the dedicated land could be used to prevent damage from fires, flood, landslides and other natural hazards

To implement this policy the City shall:

OS Implementation Measure 12: Where necessary to mitigate the potentially hazardous impacts of development, require dedication of open space.

OS Implementation Measure 13: Seek Fire Department cooperation in protecting coastal sage scrub habitat from unnecessary clearing.

OS Implementation Measure 14: Encourage multiple use of public land and easements, where appropriate, such as use of flood zones, for recreational purposes including trails, consistent with protection of Resource Protection Areas ("RPAs").

OS GOAL 2: DIVERSE OPPORTUNITIES FOR RECREATION AND LEISURE.

OS OBJECTIVE 2.1: A comprehensive network of City, County, State and Federal parks which serve as the physical component of an outdoor recreational program consistent with conservation.

OS Policy 2.1.1: The City shall assess the needs and opportunities for recreational services and programs and develop a plan to acquire land to accommodate those needs.

OS Policy 2.1.2: The City shall develop parks in accordance with the acknowledged wishes of the community, creating a balance between active and passive recreational activities.

OS Policy 2.1.3: The City shall preserve, protect and maintain parks to assure continued enjoyment for future generations.

To implement these policies the City shall:

OS Implementation Measure 15: Conduct a neighborhood by neighborhood study to identify any unmet need for local parks.

OS Implementation Measure 16: Adopt and implement a master plan of parks and recreation based upon the character and desires of the community as one of the several components of the City's integrated capital budget.

OS Implementation Measure 17: Consider special bond issues to implement the Parks Master Plan for financing land acquisition and capital improvements.

OS Implementation Measure 18: Design parks, including selection of materials and location and design of any permanent structures, to compliment the natural rural beauty of the site.

OS Implementation Measure 19: Accept private land donations which are consistent with the master plan of parks and recreation and compatible with the recreation policy of Malibu to be conveyed (with restrictions against selling) to appropriate agencies if necessary for management.

OS Implementation Measure 20: Create a gift catalog that lists items currently needed for parks to solicit donations consistent with the City's master plan for parks and recreation.

OS Implementation Measure 21: Where necessary, contract for highly specialized park maintenance services requiring large investments in equipment and personnel.

OS Implementation Measure 22: Impose fees for services to defray the costs of direct park use.

OS OBJECTIVE 2.2: Adequate recreational facilities to accommodate residents and visitors.

OS Policy 2.2.1:

The City shall identify populations with special needs (seniors, families, disabled) and design and develop facilities to meet their needs.

OS Policy 2.2.2:

The City shall identify the long and short term need for additional sporting facilities, picnic facilities, play areas and recreational parking facilities on a community-wide basis and develop a priority list of desirable facilities/projects.

OS Policy 2.2.3:

The City shall favor recreational uses that are compatible with the natural resources.

OS Policy 2.2.4:

The City shall utilize existing facilities as community, educational, cultural, recreational and health centers for residents.

To implement these policies the City shall:

OS Implementation Measure 23: Develop design criteria for recreation-serving facilities to minimize traffic, noise and visual impacts on adjacent neighborhoods. The criteria shall, at minimum, prohibit outdoor lighting from illuminating beyond the parameter of the site, require appropriate fencing and screens for ball fields, golf and tennis courts and similar recreation facilities, and require access from an arterial street where feasible.

OS Implementation Measure 24: Secure locations for two soccer fields and two baseball diamonds suitable for use by the Little League or similar organizations.

OS Implementation Measure 25: Develop and post an appropriate set of park rules which encourage respect for the facility in all its aspects, including respect for fellow users.

OS Implementation Measure 26: Permit only passive recreational activities in environ-mentally sensitive areas, including hiking, nature study, horseback riding, bicycling, picnics, sunbathing, swimming, surfing, diving, and photography.

OS Implementation Measure 27: Require that entrance roads, fee kiosks, parking facilities and other necessary developments in recreation areas be designed to maintain environmental and visual compatibility with the surrounding area.

OS Implementation Measure 28: New paving for parking lots shall not be permitted on sandy beaches unless a comparable replacement area of sandy beach is restored through removal of existing paving or structures.

OS Implementation Measure 29: Develop shared-use agreements with the school district and other public agencies which make available sports facilities, libraries, fields, classrooms, and auditoriums for public recreation.

OS Implementation Measure 30: Seek new reliable, secure and predictable funding such as fees for services, development fees or a nominal City-wide tax, to facilitate public recreation.

OS OBJECTIVE 2.3: A first-class system of recreational and cultural programs.

OS Policy 2.3.1: The City shall plan and develop a seasonal recreational program to serve the needs, interests, and desires of the community as a whole.

OS Policy 2.3.2:

The City shall develop and maintain cooperative programs with the school district, Pepperdine University, County, State and National Parks, and non-profit agencies to deliver recreational services.

OS Policy 2.3.3:

The City shall promote community participation in organized recreational programs, self-directed activities and special events.

OS Policy 2.3.4:

The City shall give attention to the recreational needs of specialized groups including disabled, families, preschoolers, senior citizens, shut-ins and visitors by integrating special classes and programs into the City's regular recreation programs.

OS Policy 2.3.5:

The City shall continue Malibu's traditional emphasis on enjoyment of shoreline and ocean sports and recreation.

OS Policy 2.3.6:

The City shall strive to make recreation programs accessible and affordable.

OS Policy 2.3.7:

The City shall program recreational uses to minimize adverse impact on natural resources.

To implement these policies the City shall:

OS Implementation Measure 31: Review and update a long range plan for recreation services and facilities working with citizen based advisory groups, Federal, State and County agencies.

OS Implementation Measure 32: Cooperate with state and federal parks agencies in the Santa Monica Mountains National Recreation Area in providing programs for people of all ages to: a) enhance understanding of fragile natural processes; b) engender appreciation and enjoyment of natural resources in the area; c) increase awareness of how to safely enjoy natural areas while protecting natural resources for their own sake and for the enjoyment of others and for future generations; d) encourage awareness of the area's rich Native American period and more recent cultural history.

OS Implementation Measure 33: Designate appropriate shoreline areas for launching of non-motorized watercraft, such as catamarans, skiffs and dinghies.

OS Implementation Measure 34: Work with other agencies to manage beach parking.

OS Implementation Measure 37: Offer recreation programs on a year-round basis and advertise them in the City's newsletter.

OS Implementation Measure 39: Classify beaches and parks according to their ability to withstand adverse impacts and work with other agencies to regulate their use accordingly. Each beach and park shall be treated consistent with its individual characteristics.

OS GOAL 3: AN INTEGRATED CIRCULATION SYSTEM OF PUBLIC TRAILS.

OS Policy 3.1.1: The City shall create a safe, properly maintained trail system throughout Malibu's mountains and seashore that can achieve the following:

- ## Open Space and Recreation Element

OS Policy 3.1.2:

The City shall seek to protect the residents from inappropriate or irresponsible use of designated trails.

OS Policy 3.1.3:

The City shall favor trails that alleviate trespass and do not infringe on the privacy of residents.

To implement these policies the City shall:

OS Implementation Measure 41: Map trails systems and bicycle routes within the City and connecting to trails outside the City using existing information including, but not limited to, that gathered from historical maps, subdivision maps, tract maps, Malibu Trails Association data, Santa Monica Mountains Trails Association, Los Angeles County Department of Parks and Recreation, State Parks and the National Park Service.

OS Implementation Measure 42: Develop a comprehensive trails plan on an area by area basis based on the information gathered in connection with the trails map for the primary purpose of connecting trails within the City and joining them to trails in its planning area.

OS Implementation Measure 43: Explore east-west routes for pedestrian, bicycle and equestrian trails to enable people to move throughout Malibu avoiding Pacific Coast Highway.

OS Implementation Measure 44: Give priority in implementation to proposed trails, especially bicycle routes, located adjacent to or leading to schools and recreation facilities and trail systems for cross town connections.

OS Implementation Measure 45: Ensure public participation during the preliminary planning and selection of final alignment of trails.

OS Implementation Measure 46: Examine every development application for the existence of easements that connect with, and continue to allow public access to, recreation and open space areas, and monitor construction with a view toward the preservation of those easements.

OS Implementation Measure 47: Mark public trails and bicycle lanes with directional signs coordinated with the natural environment for identification and access and provide buffers to ensure protection of sensitive environmental resources.

OS Implementation Measure 48: Establish trail heads and/or equestrian staging areas on a trails plan and give priority to regional trail connections.

OS Implementation Measure 49: Work with other agencies to ensure adequate parking at all established trail heads and staging areas.

OS Implementation Measure 50: Incorporate safety standards into all trail and bicycle route designs such as minimum width standards, posting level of difficulty notices, and segregating bicycle from equestrian trails.

OS Implementation Measure 51: Incorporate safe street crossing provisions into any trails/routes crossing highways and roads and establish formal "crossings" on a trails plan.

OS Implementation Measure 52: Reclaim public streets for trail use by requiring the removal of walls, landscaping and similar obstructions in public rights-of-way.

OS Implementation Measure 53: Where possible, obtain trail dedications and easements consistent with the trails plan.

OS Implementation Measure 54: Prohibit grading of trails that inhibits their safe use and work with other agencies to unblock trail/road easements to allow for safe passage of trail users.

OS Implementation Measure 55: Adopt procedures for investigating the validity of prescriptive rights. Where public prescriptive rights or implied dedication (historic public use) is found, require an offer of dedication or an equivalent public access easement. Site development in an area of historic public use only if equivalent type, intensity and area of replacement public access is provided on or within 1,000 feet of the project parcel.

OS Implementation Measure 56: Post and maintain directional and regulatory signs in publicly accessible RPAs.

OS OBJECTIVE 3.2: Access to the beach and shoreline consistent with the protection of coastal resources and conservation.

OS Policy 3.2.1: The City shall require reasonable and equitable beach access for the public, balancing the rights of the individual property owner and the public's right of access.

To implement these policies the City shall:

OS Implementation Measure 57: Prepare a Beach Accessway Map to show dedicated accessways and accessways that are improved and opened. Evaluate all proposed access dedications considering site specific circumstances including topography, the capacity of the site to sustain use at the intensity anticipated, the proximity to adjacent residential uses, the impact on privacy of adjacent owners, the feasibility for providing litter collection, and the public safety.

OS Implementation Measure 58: Assure that improvements are in place and a public agency is willing to accept management of an accessway before opening a beach accessway requiring vertical pedestrian pathways.

OS Implementation Measure 59: Offer beach agreements in areas where the beach is bordered by residential development. The agreements may establish permitted and prohibited uses and conditions of use (such as hours and areas subject to use) taking into account the particular beach's characteristics, potential recreational opportunities and existence of public vertical and lateral accessways.

OS Implementation Measure 60: To mitigate the impacts of development, in connection with development agreements require dedicated beach accessways.

OS Implementation Measure 61: Unless the public interest on a particular site implicates different standards, the design standards and accessway goals for the City are as follows:

Vertical Access: For all land divisions, non-residential new development, and residential development on lots with 75 or more feet of frontage, or with an existing drainage or utility easement connecting a public street with the shoreline, or on groups of two or more lots with 50 feet or more of frontage per lot, an irrevocable offer of dedication of an easement to allow public vertical access to the mean high tide line shall be required, unless needed public access is already fulfilled by an existing developed accessway within the standard of separation provided under "Beach Access Program" (Table 2-5). Such offer of dedication shall be valid for a period of 21 years, and shall be recorded free of prior liens except tax liens. The access easement shall measure at least ten (10) feet wide. Where two or more offers of dedication closer to each other than needed for reasonable access have been made pursuant to this policy, the physical improvement and opening to public use of offered accessways sufficient to meet such need shall result in the abandonment of other unnecessary offers.

Exceptions to the above requirement for offers of dedication may be made for beaches identified as needing limitations on access in order to protect sensitive marine resources.

Lateral Access: For all development between the first public road and the ocean, an irrevocable offer of dedication of an easement to allow public lateral access along the shoreline shall be required unless findings are made consistent with Section 30212 of the California Coastal Act, that access is inconsistent with public safety. Such offers of dedication shall run with the land in favor of a public agency or private association approved by the City. Such offers shall be in effect for a period of 21 years, and shall be recorded free of prior liens, except tax liens.

The area subject to an access easement shall extend from the mean high tide line landward to (a) the dripline of an existing or proposed structure, or (b) to the top outer face of an approved seawall or revetment, or (c) to the base of the bluff where the bluff exceeds five (5) feet in height, whichever is further seaward. Where the easement area adjoins a residential structure, as in (a) above, a strip ten (10) feet wide, measured seaward from the structure, shall be available only for public pass and repass when the remainder of the easement area is not passable.

Notwithstanding the above requirements, the lateral access requirement on lots fronting Broad Beach shall be as follows: an irrevocable offer of dedication of an easement from the mean high tide line to a line 25 feet inland of the daily high water line. This offer of dedication shall state that the daily high water line is understood by all parties to be ambulatory from day to day, as is the 25-foot wide strip of dry, sandy beach. In no case shall said access easement be closer than ten (10) feet to the approved development. On shoreline developed with residential uses, the required lateral access easement shall be limited to passive recreational use.

In addition, all fences, no trespassing signs, and other obstructions that may limit public lateral access within the dedicated easement or deed-restricted area shall be removed as a condition of development approval. The City shall support acceptance of offers of dedication by appropriate groups or governmental agencies.

OS Implementation Measure 62: Impose appropriate development fees to mitigate the impacts of commercial development on beach access and explore other methods to finance the construction and maintenance of new vertical access points.

OS Implementation Measure 63: Require parking lots for general office buildings be designed with the goal of serving not only office development during ordinary working hours, but also public beach parking during off hours, in conjunction with public transit or shuttle buses serving beach recreation areas.

OS Implementation Measure 64: Work with other agencies to ensure that existing developed accessways are not closed, abandoned or rendered unusable.

OS Implementation Measure 65: Use the following criteria when acquiring and improving vertical accessways and to determine the appropriate frequency of public accessway locations in view of localized beach settings and conditions:

- a. Priorities for improved vertical public access in the City shall be in accordance with Table 2-5. These priorities are based on (1) the extent to which existing, opened accessways fulfill the need for vertical accessways and (2) the need to protect sensitive environmental resources.
- b. Improvement of access to sandy beaches where there is no current public access.
- c. Improvement of accessways already in public ownership or by accepting offers of dedication which were already made where to do so would allow the agency to avoid requiring future unnecessary offers of dedication.
- d. Capacity to allow emergency vehicle passage from highway to beach and return, except where steepness or the existence of stairs would not allow vehicle use.

- e. Improvement of accessways where parking or access to a public transit stop is available. Where possible, new off-street parking or public transit facilities should be provided.

OS OBJECTIVE 3.3: Public access to open space in harmony with reasonable privacy of residents and well being of the community.

OS Policy 3.3.1: The City shall work to ensure that public access is consistent with conservation.

OS Policy 3.3.2: The City shall balance public access to open space and park lands with the privacy and property interests of abutting property owners.

To implement these policies the City shall:

OS Implementation Measure 66: Regulate use of public accessways, with the appropriate use consistent with the programs and policies of the Safety and Conservation Elements.

**Table 2-5:
Beach Access Program
Vertical Access Standards**

Coastal Area Name	Access Standard	Additional Access	Additional Public Beach Need
<u>Leo Carillo</u>		No	No
<u>Nicholas Canyon</u>		No	
<u>Encinal</u>	1/4 mile	Yes (1)	Yes
<u>Lechuza</u>	1/4 mile	Yes	Yes
<u>Trancas</u>	1/4 mile	No	Yes
<u>Zuma</u>		No	No
<u>Point Dume</u>		No	No
<u>Dume Cove</u>		No (2)	No
<u>Paradise Cove</u>		No	Yes (3)
<u>Escondido</u>	1/4 mile	Yes - 1 (4)	No
<u>Latigo</u>	1/4 mile	No	No
<u>Corral</u>		No	No
<u>Amarillo</u>	1/4 mile	No	No
<u>Malibu Beach</u>	1/4 mile	Unknown (5)	No
<u>Malibu Lagoon/ Surfrider State Beach</u>		No	No
<u>Carbon Beach</u>	1/4 mile	Unknown (5)	Yes
<u>Big Rock</u>	1/4 mile	Unknown (5)	Unknown (5)
<u>Las Tunas</u>	1/4 mile	Unknown (5)	Unknown (5)

Notes:

- (1) County of Los Angeles owns an unopened accessway at El Sol. State of California has completed accessways at El Pescador, La Piedra, and El Matador. Two vertical access offers of dedication shall be required in the area between Nicholas Canyon and El Pescador for a separation of approximately one accessway per quarter mile. Development of the El Sol accessway may satisfy one of the two requirements. The second offer of dedication shall be located at least 600 feet west of El Sol.
- (2) Adequate physical access via Point Dume State Park area.
- (3) Public purchase of sandy beach for passive recreational purposes and other recreation-supporting facility, e.g. restored pier.
- (4) Dedication required to meet an objective of one vertical accessway in addition to those existing at Escondido Creek and Geoffrey's. One of the two is presently under construction under management of the Surfrider Foundation.
- (5) Access locations at this time are unknown. Requires Access Map update.

APPENDIX A -- INVENTORY OF PUBLIC RECREATIONAL RESOURCES

WEST MALIBU

Leo Carrillo State Beach.

Swimming, diving, tidepool observation, scenic rocky point, sailboarding, surfing (all levels), picnicking, camping, hiking, bicycling, group campground, campfire gatherings, interpretive programs, junior lifeguard program, convenience store, visitor center, Natural History Association, back country equestrian trails, trail maintenance volunteers, seasonal lifeguard.

Nicholas County Beach.

Surfing, (expert, Point Zero fast breaking left), body surfing, beach enjoyment, seasonal lifeguard.

Malibu Riding and Tennis Club (private commercial recreation, access to back country trails).

El Sol (undeveloped) County Beach Accessway.

Robert S. Meyer State Beaches: El Pescador, La Piedra, and El Matador.

All beach activities, seasonal lifeguard patrols.

Charmlee Natural Area:

Hiking, picnicking, interpretive center, equestrian trails, docents group, scheduled nature events.

Sea Level Drive:

Homeowners Association has voluntarily opened easement along Sea Level Drive to provide access to public shoreline.

Broadbeach Road: Two County Beach Accessways.

Malibu West:

Malibu West Swimming Club and tennis courts (private for tract residents). Swimming Club Facilities are available on a rental basis for weddings, receptions, and community uses.

Malibu Park:

School properties, Equestrian Center

School facilities, include tennis courts, track, fields, asphalt basketball and volleyball courts, gym for indoor basketball and volleyball, gymnastics and yoga room, swimming pool, auditorium, classrooms, library. The school is a center for community athletic activities for all ages.

Equestrian Center is managed by the City, and includes a rink and some storage facilities, as well as trailhead parking. Trails from the Equestrian Center to back country are still under consideration.

Zuma County and Westward State Beaches:

All beach activities, extensive parking, lifeguards during good weather, junior lifeguard program, surfing, seasonal food services, Los Angeles County North Beach Lifeguard Headquarters, Fire Department and Lifeguard training location, rescue boat Bay Watch seasonal mooring, rock climbing, volleyball, triathlons, running events, ocean sports contest venue, bird watching at lagoon, catamaran storage area, swimming can be dangerous here because of powerful rip currents and crashing shorebreak, parking lot is used for power walking and running.

Point Dume:

Point Dume Headlands State Preserve and Malibu Community Center:

Point Dume Headlands State Preserve is reached from Westward Beach parking lot, includes giant choreopsis stands and other native vegetation in need of restoration, and access to Big Dume Beach and "Mistos" surf break. The rocky point and beaches fronting the headland are a protected marine mammal habitat.

Malibu Community Center, formerly Point Dume School, owned by SM-MUSD, managed by Point Dume Community Services District, provides facilities for activities for people of all ages, community organizations, and businesses who rent space there, including a privately owned nursery school/day care center. Outdoor facilities include asphalt courts, green park, children's play equipment.

Paradise Cove:

Beach, Fishing Pier, walk-in fee beach access, no surf boards allowed.

Escondido Beach:

Surfrider Foundation public accessway from Pacific Coast Highway to beach.

Sycamore Park:

Public beach easement:

CENTRAL MALIBU

Dan Blocker State Beach:

Access to shoreline, no facilities or lifeguard service.

Solstice Canyon Park:

Hiking, picnicking, equestrian trails, year round stream, historic buildings, waterfalls, Santa Monica Mountains Conservancy offices, visitor center, plant restoration projects, events and interpretive programs, creekside trail leads to passage under Pacific Coast Highway to Corral State Beach.

Corral State Beach:

Narrow beach for sunbathing and swimming, seasonal lifeguard, highway parking, popular scuba diving class location.

Malibu Road Beach Accesses:

Five accessways are open.

Malibu Bluffs Los Angeles County Regional Park:

Baseball, soccer, football, hiking trails, natural area, sculpture display, Michael Landon Center used for small meetings, receptions, interpretive programs, arts, theater and dance classes, etc..

Pepperdine University (Adjacent to City limits):

Athletic facilities memberships available to the public, cultural events, sports events, art gallery, library, educational programs. Theaters are available for community programs.

Civic Center:

County Buildings: City Hall location, Library, Courts, Community Room.

Private Tennis Club

Malibu Country Mart green park and children's play area.

Serra Retreat.

Webster School auditorium

Cross Creek Road leads to private horse boarding and training facilities. Trails lead to Ringe Dam and through Malibu Canyon.

Malibu Lagoon/Surfrider State Beach Park:

Malibu Lagoon Preserve, bird watching, nature study, swimming, surfing, Adamson House and Gift Shop, Malibu Historic Society, Adamson House and Malibu Creek State Park Docents, seasonal lifeguard.

Surfrider Point, aka Malibu Point or "The Bu":

Premier historic west coast surfing location, glassy rights wrap around the point to form a sequence of three glassy green hollow breaks, or, if the lagoon is consistently breached in the right spot, a single long ride from third point almost to the pier. Malibu Point is the birthplace of California Surf Culture, dating from the times when Santa Monica Surfers sneaked past the Ringe Ranch guards to reach the waves, location where the legendary "Gidget" met the Great Kahuna. Surfers are currently at risk from polluted water exiting Malibu Lagoon. Lifeguard. No swimming or boogie boarding allowed in the surf zone. Swimming on east side of Malibu Pier where there is no lifeguard.

Malibu Pier:

Deep sea fishing excursions, bait and tackle, pier fishing, Alice's restaurant, Plein Air Artists of the Santa Monica Mountains and Seashore monthly exhibits. Historic landmark in need of restoration.

Zonker B. Harris County Beach Accessway next to the restaurant located at 22706 Pacific Coast Highway.

EAST MALIBU

La Costa:

La Costa Beach Club, and tennis courts, private for La Costa residents. Facilities are available on a rental basis for receptions, birthday parties, etc.

Big Rock:

County Beach Access near Big Rock Road.

Las Tunas State Beach:

Highway parking, hazardous swimming because of decaying groins, seasonal lifeguard.

SCHOOL DISTRICT PROPERTIES

The Santa Monica-Malibu Unified School District owns properties sprinkled about Malibu which have potential for neighborhood or community park uses and for which the City could exercise right of refusal should they be offered for sale. These properties should be mapped and evaluated for recreation potential.

CONSERVATION ELEMENT

Introduction

This document describes the methodology used to develop the Conservation Element of the General Plan. The methodology was developed by the Planning Department in collaboration with the Planning Commission and the Board of Supervisors. The methodology is based on the following principles:

Conservation Element

1. Purpose

The purpose of the Conservation Element is to provide a framework for the development and implementation of conservation programs and policies. The element is designed to be consistent with the General Plan and the State Water Resources Control Board's requirements.

CONSERVATION ELEMENT

2. Objectives

The objectives of the Conservation Element are to:

- 1. Establish a framework for the development and implementation of conservation programs and policies.
- 2. Provide a framework for the development and implementation of conservation programs and policies.

3. Policy Statement

The Policy Statement of the Conservation Element is to provide a framework for the development and implementation of conservation programs and policies. The policy statement is designed to be consistent with the General Plan and the State Water Resources Control Board's requirements.

Conservation Element Table of Contents

3.1	Introduction	1
3.1.1	Legislative Authorization	1
3.1.2	Purpose and Scope	1
3.2	Existing Natural Resources	1
3.2.1	Air Resources and Climate	3
3.2.1.1	Regional Meteorology/Climatology	3
3.2.1.2	Air Pollution Meteorology	3
3.2.1.3	Air Quality Regulatory Environment	4
3.2.2	Mineral Resources	5
3.2.3	Soil Resources	5
3.2.4	Water Resources	6
3.2.4.1	Surface Water	6
3.2.4.2	Water Supply	15
3.2.4.3	Groundwater	15
3.2.5	Beach and Shoreline Resources	16
3.2.5.1	Environmentally Sensitive Beach and Shoreline Resources	17
3.2.6	Marine Resources	18
3.2.6.1	Marine Vegetation Communities	19
3.2.6.2	Rare, Endangered and Threatened Species	19
3.2.6.3	Environmentally Sensitive Marine Resource	19
3.2.6.4	Areas of Special Biological Significance (State Water Quality Control Board)	20
3.2.7	Vegetation and Wildlife Resources	21
3.2.7.1	Holland Terrestrial Plant Communities	21
3.2.7.2	Wildlife Habitat	28
3.2.7.3	Rare, Endangered or Threatened Species	32
3.2.8	Identification of Significant Natural Resources	32
3.2.8.1	Prior Inventories and Evaluations of Sensitive Biological Resources	32
3.2.8.2	Significant Ecological Areas (Malibu/Santa Monica Mountains Interim Area Plan, Los Angeles County General Plan)	43
3.2.8.3	Environmentally Sensitive Habitat Areas (Malibu LCP Land Use Plan)	43
3.2.9	Protection of Sensitive Habitat Areas	46
3.2.9.1	Resource Protection Standards in the Coastal Zone	46
3.2.9.2	Resource Protection Areas in the Malibu Coastal Zone	46
3.2.10	Scenic Resources	55
3.2.10.1	Vistas	56
3.2.10.2	Ridgelines	60
3.2.10.3	Scenic Highways	60
3.2.10.4	Viewsheds	61
3.2.11	Cultural Resources	61
3.2.11.1	Historic Sites	61
3.2.11.2	Archaeological Resources	62

3.2.11.3	Paleontological Sites	64
3.3	Constraints	64
3.3.1	Physical Changes in the Environment	64
3.3.2	Lack of Comprehensive Resource Surveys	65
3.3.3	Maintenance of High Quality Water Resources	65
3.3.4	Recreational Uses	66
3.3.5	Limited City Resources	67
3.3.6	Development Pressure and Rising Property Values	67
	GOALS, OBJECTIVES, POLICIES AND IMPLEMENTATION MEASURES	69
	APPENDIX A - Analysis of Sensitive Terrestrial Habitats by Location	84

3.1 Introduction

The following information provides an overview and summary of the natural resources in the City of Malibu. This information is only a summary of the more

detailed information provided in the "Conservation Element Background Report" presented in a Technical Appendix to the Malibu General Plan.

3.1.1 Legislative Authorization

The California Government Code requires all city and county general plans to contain a Conservation Element as part of the General Plan. Specifically, Government Code Section 65302 requires that a conservation element address the conservation, development and utilization of natural resources including:

- | | |
|---------------------------------|-------------------------|
| • Water and its hydraulic force | • Forests |
| • Soils | • Rivers & other waters |
| • Harbors | • Fisheries |
| • Wildlife | • Minerals |
| • Plants | • Watersheds |
| • Beaches and shoreline | |

3.1.2 Purpose and Scope

The purpose of the Conservation Element is to serve as a guide for the conservation, protection, restoration and management, development, and appropriate and responsible utilization of the City's existing natural resources. Substantial areas of land within the City of Malibu and north of the City within the Malibu Coastal Zone (MCZ) are undeveloped or contain an abundance of natural resources. To protect these resources, it is important for the City to establish policies which promote intelligent management of the resources. These policies should address a variety of natural resources issues that include water quality, coastal and slope erosion, maintenance of unique plant communities, habitat protection, and viable populations of plants and wildlife, and preservation of visual resources.

The MCZ (Figure CO-1) is used as the geographic unit whose resources are addressed by this Conservation Element. The resources of this area are addressed because natural resources located within the City limits are (a) an extension of resources located elsewhere within the MCZ, (b) intimately interrelated with other resources located elsewhere in the MCZ, and (c) potentially affected by impacts to other resources within the MCZ. The resources of the entire MCZ are also addressed because (d) they provide significant opportunities to residents and visitors to the City and (e) the City's sphere of influence may include these resources in the future.

the following information provided in the report of the study of the impact of the 1997-1998 El Niño on the environment in the coastal zone of the Pacific Northwest. The study was conducted by the Pacific Northwest Laboratory (PNL) and the University of Washington (UW) in cooperation with the National Oceanic and Atmospheric Administration (NOAA). The study was funded by the NOAA Office of Ocean Resources and the NOAA Office of Ocean Conservation and Assessment. The study was conducted in the coastal zone of the Pacific Northwest, from the mouth of the Columbia River to the mouth of the Willapa River. The study was conducted in the coastal zone of the Pacific Northwest, from the mouth of the Columbia River to the mouth of the Willapa River. The study was conducted in the coastal zone of the Pacific Northwest, from the mouth of the Columbia River to the mouth of the Willapa River.

1. Study Area	2. Study Period	3. Study Objectives	4. Study Methods	5. Study Results	6. Study Conclusions
1. Study Area	2. Study Period	3. Study Objectives	4. Study Methods	5. Study Results	6. Study Conclusions
1. Study Area	2. Study Period	3. Study Objectives	4. Study Methods	5. Study Results	6. Study Conclusions
1. Study Area	2. Study Period	3. Study Objectives	4. Study Methods	5. Study Results	6. Study Conclusions
1. Study Area	2. Study Period	3. Study Objectives	4. Study Methods	5. Study Results	6. Study Conclusions
1. Study Area	2. Study Period	3. Study Objectives	4. Study Methods	5. Study Results	6. Study Conclusions

The purpose of this study was to determine the impact of the 1997-1998 El Niño on the environment in the coastal zone of the Pacific Northwest. The study was conducted in the coastal zone of the Pacific Northwest, from the mouth of the Columbia River to the mouth of the Willapa River. The study was conducted in the coastal zone of the Pacific Northwest, from the mouth of the Columbia River to the mouth of the Willapa River. The study was conducted in the coastal zone of the Pacific Northwest, from the mouth of the Columbia River to the mouth of the Willapa River. The study was conducted in the coastal zone of the Pacific Northwest, from the mouth of the Columbia River to the mouth of the Willapa River. The study was conducted in the coastal zone of the Pacific Northwest, from the mouth of the Columbia River to the mouth of the Willapa River.

The study was conducted in the coastal zone of the Pacific Northwest, from the mouth of the Columbia River to the mouth of the Willapa River. The study was conducted in the coastal zone of the Pacific Northwest, from the mouth of the Columbia River to the mouth of the Willapa River. The study was conducted in the coastal zone of the Pacific Northwest, from the mouth of the Columbia River to the mouth of the Willapa River. The study was conducted in the coastal zone of the Pacific Northwest, from the mouth of the Columbia River to the mouth of the Willapa River. The study was conducted in the coastal zone of the Pacific Northwest, from the mouth of the Columbia River to the mouth of the Willapa River.

**Insert
Figure CO-1**

3.2 Existing Natural Resources

The City of Malibu is located on the coastal slopes of the Santa Monica Mountains and is bounded by the Pacific Ocean to the south. The City has a variety of unique natural resources due to this

juxtaposition between the mountains and the ocean. These resources include canyon and coastal topography; a variety of terrestrial, freshwater and marine habitats; rare, threatened and endangered species of plants and wildlife; and numerous historic, archaeological and paleontological sites. These resources, as well as other natural assets, are each addressed in greater detail within the Conservation Element.

3.2.1 Air Resources and Climate

3.2.1.1 Regional Meteorology/Climatology

Malibu's climate is classified as dry summer subtropic or Mediterranean. Regions within this climate zone are characterized by hot, dry summers with relatively cool, moist winters. This climate only occurs in five areas of the world at approximately 33 degrees latitude on the western edges of continents and includes: southern California; central Chile; southern Australia; the cape region of South Africa; and the Mediterranean region of Europe. Only about three percent of the world's land surface have this climate. The unique characteristics of the Mediterranean climate regime, particularly the extended period of summer drought, have led to the evolution of distinctive associations of plant and animal species.

The regional climate is controlled almost entirely by the semi-permanent Pacific High Pressure Cell (Pacific High) and the cold water California Current. The summer climate is strongly influenced by stable air flowing out of the Pacific High to the west. During the Malibu winter the Pacific High migrates south putting the City on the fringe of the influence of a low pressure cell. The combined effect of these meteorologic and oceanographic systems is a tempering of local weather such that extremes of wind, temperature and precipitation are relatively uncommon.

Skies are mostly clear from mid-summer through autumn. Heavy cloud cover and fog occur primarily during spring and early summer when stratus clouds associated with the marine layer move in from the west. Compared to other locations of the same latitude and climate, Malibu summers are generally cooler with temperatures in the upper 60s to low 70s, and winters tend to be mild within the range of the upper 50s to low 60s.

3.2.1.2 Air Pollution Meteorology

The City of Malibu is located within the South Coast Air Basin. The South Coast Air Basin's air quality is affected not only by the emission sources located in the region, but also to a large extent by three natural factors or combinations of: (a) terrain; (b) a dominant on-shore flow; and (c) atmospheric inversion. The first of these factors is static, but plays a significant role by placing a natural barrier to emission dispersion north and east of the metropolitan Los Angeles area.

The second factor provides the driving mechanism for both air pollution transport and dispersion. This mechanism has been shown to be a predominantly on-shore flow. Air pollution which has its origins in the industrial areas along the coast and immediately inland is driven toward the natural terrain barrier mentioned above with the result that horizontal dispersion is severely limited. The effect of this second factor can be seen as a gradual degradation of air quality from coastal to inland areas. Malibu is typical of some of the South Coast Air Basin's best air quality areas because of its location along the coast upwind from most mobile and stationary sources. The greatest impacts can be seen in the San Gabriel Valley and near Riverside at the foot of the San Gabriel Mountains.

The third factor which affects air quality involves atmospheric inversions which limit dispersion of air pollution on a vertical scale. Inversions can be classified into one of two general categories: (1) inversion aloft or (2) surface based inversions. These two categories are the result of different meteorologic conditions and tend to affect different sources.

Inversions aloft are probably the most critical factor in the degradation of regional air quality. The condition is defined by a vertical temperature profile which initially conforms to standard conditions. For example, temperature typically decreases with height. However, under inversion conditions temperature begins to increase at some height above the ground. This height is called the base of the inversion. The temperature increase continues through an unspecified layer after which the temperature change with height returns to standard conditions. The inversion layer is typically very stable and acts as a cap to the vertical dispersions of pollutants.

The largely undeveloped Santa Monica Mountains provide some amelioration of air quality impacts from the urbanized Los Angeles basin.

3.2.1.3 Air Quality Regulatory Environment

The basis for determining the significance of air quality impacts generated by a base case project are the State and Federal Ambient Air Quality Standards (AAQS). These standards define the level of air quality capable of protecting the public health and welfare with an adequate margin of safety. The AAQS were developed to protect those portions of the population most susceptible to respiratory distress. Classified as sensitive receptors, this group includes persons with asthma or other respiratory disorders, the elderly, very young children and hospital patients. Normally, healthy adults can tolerate periodic exposure to air pollution in concentrations well above the standards. However, even this segment of the population has shown signs of deteriorating health under long term exposure to air pollution at or above the standards.

The federal standards were established in 1971 by the Environmental Protection Agency (EPA). The EPA allows states to adopt standards of their own as long as they are at least as stringent as those issued at the Federal level. California, due to the complexity of its air quality problems, adopted its AAQS prior to the adoption of the Federal standards.

In 1976 the State legislature enacted the Lewis Air Quality Management Act which established the South Coast Air Quality Management District (SCAQMD) and required it, in conjunction with the Counties and Cities within the District, the Southern California Association of Governments (SCAG), the California Air Resources Board (CARB) and the State Department of Transportation (Caltrans), to develop a plan to attain and maintain the State Ambient Air Quality Standards in the South Coast Air Basin. The SCAQMD, however, is responsible only for local stationary sources of pollution while CARB retains authority over all mobile source emissions.

3.2.2 Mineral Resources

In order to promote the conservation of the State's mineral resources and ensure adequate reclamation of mined lands, the Surface Mining and Reclamation Act of 1975 (SMARA) was enacted. SMARA requires that the State geologist classify land in California for its mineral resource potential. Local governments are required to incorporate the mineral classification reports and maps into their general plans in order for the resources to be given consideration when making land use decisions.

Sand and gravel resources are the only mineral resources which have been mapped in western Los Angeles County. However, to date the State Division of Mines and Geology has not mapped these resources or other mineral resources in the Malibu area. Given the presence of the numerous incised canyons and drainages, sand and gravel resources are expected to occur in the MCZ. Mapping of this area is scheduled to occur prior to 1996 if the appropriate funding is allocated (R. Miller, State Division of Mines and Geology, personal communication)

3.2.3 Soil Resources

Soil types in the City of Malibu have been classified by the United States Department of Agriculture, Soil Conservation Service (SCS). (Note that the SCS has recently been reorganized as the Natural Resources Conservation Service, NRCS). These SCS classifications are associated with identified soil capabilities which may be used in planning for agricultural, urban, watershed, recreational and wilderness uses. The identified soil capabilities provide the basis from which opportunities and constraints associated with soil resources are identified.

The SCS has identified 22 soil series and 45 soil phases in the Malibu area (Malibu Soil Survey, 1967). Soil series are soils that are grouped together because they have a similar set of soil profile characteristics. The soil phase is a division of the soil series in which the soils are grouped together by common surface and substrata characteristics. Important characteristics used to determine soil phase are surface texture, slope and quantity of stones.

Agricultural land is limited within Malibu. This limitation is primarily due to the patchy distribution of soils that have high capability for agricultural uses, and that these soils typically occur along the low relief slopes adjacent to the coast. These areas are the same areas which have the highest capability for urban development and many have already

been developed. As a consequence, agriculture currently accounts for only 52.4 acres (0.5%) of all land uses within the City. Historically, agricultural uses, including grazing, were much more widespread and these previous uses may have influenced the types of plant communities which are currently found in the City.

Over 80% of the soils identified by the SCS in the Santa Monica Mountains have high or very high erosion potential. The native vegetation is critical to protecting the soil from erosion, particularly on steep slopes. Removal of vegetation leads to accelerated erosion which adversely impacts stream and marine resources.

The engineering capabilities identified by the SCS are also a very useful planning tool for the City of Malibu. Soil suitability for road and building construction, recreation facilities, septic tank filter fields and other uses are all identified in the Malibu Soil Survey (1967). Further discussion of soils, especially as they relate to engineering capabilities is provided in the Safety Element.

3.2.4 Water Resources

The City of Malibu is located within a 27 mile coastal stretch along the Pacific Ocean. There are numerous streams and creeks which drain the hillsides and canyons within this area. In addition, Malibu Lagoon, which is located at the mouth of Malibu Creek, is one of two significant coastal marshes occurring in Los Angeles County.

3.2.4.1 Surface Water

There are 44 blue-line streams identified by the United States Geological Service (USGS) within the City of Malibu. These streams include perennial and intermittent streams which are defined by a variety of non-standardized, qualitative criteria such as the presence of riparian vegetation, a stream bed, or actual hydrology. Many of the USGS blue-lines have not been updated since 1950 and there are many channels that are not significantly different hydrologically from streams with blue-line status. Consequently, the identification of all hydrological channels that are associated with the City of Malibu has not been conducted. To effectively manage these drainages would require development of new qualitative, as well as quantitative, criteria based on floodplain width, flow rate and periodicity, erodibility, riparian vegetation, presence of sensitive flora and fauna, and human influence on channel hydraulics. The location, significance, constraints, and opportunities associated with these channels can be determined only after development of these criteria.

There are 62 identified watersheds which occur within the boundaries of the City of Malibu (Malibu Wastewater Management Study, 1992). These watersheds consist of smaller, coastal terrace watersheds which often have their headwaters located within a few hundred feet of the ocean and large watersheds which drain the coastal drainages of the Santa Monica Mountains (Figure CO-2 illustrates the 28 major mountain drainages). Malibu Creek is the only cross-mountain watershed and drains portions of the Simi Hills in addition to portions of the Santa Monica Mountains. The largest watershed is the

Malibu Creek coastal watershed which drains an area of approximately 74,000 acres (115 square miles). Large coastal watersheds include Ramirez (4.5 sq. miles), Las Flores (4.75 sq. miles), Solstice (4.43 sq. miles), Trancas (8.39 sq. miles), and Zuma Canyon (8.86 sq. miles), Topanga (19.68 sq. miles) and Arroyo Sequit (10.96 sq. miles).

Of the watersheds identified within the City boundaries, twenty-two of the drainage areas extend beyond the its northern boundary and are affected by residents and agencies not under the jurisdiction of the City of Malibu. Effective management of these watersheds requires joint-powers agreements designed to protect downstream resources and users of these resources.

Watersheds are the basic geographic unit within which non-point sources of pollution and sedimentation can be addressed. Within the City of Malibu these sources of water quality contamination are primarily associated with upstream discharge of treated effluent from lands inland of the City and stormwater conveyance of fertilizers, manure, petroleum products (i.e., gasoline, oil, other lubricants), chemicals from car exhaust, livestock (i.e., horses), commercial discharges, sedimentation and dispersed contributions of pathogens from local septic systems (Malibu Wastewater Management Study, 1992). Much of the chemical contamination is originally derived from the surfaces of pavement and other forms of hardscape, while increased sediment loads are associated with grading, excavation, and other forms of vegetation disturbance (i.e., fires, grazing, agricultural practices, vegetation removal for fire and flood control).

The primary sources of discharge to City of Malibu watersheds are the Tapia Water Reclamation Facility (TWRF) at Calabasas and urban stormwater runoff. The former source of discharge is only associated with Malibu Creek. TWRF is known to discharge up to 7.4 million gallons per day (daily average during March 1991) of treated effluent to the upper reaches of the drainage; TWRF has permits to expand to 16 million gallons per day. These discharges, however, have varied widely from season-to-season and year-to-year (Harris, 1991; Gearhart and Waller, 1989.) As an example, 1990 was a low release year because the Las Virgenes Water District sold all of its discharge for July, August, and September. Although effluent from the TWRF has accounted for a significant portion of the past annual flow in the creek, especially during the summer months, demand for reclaimed water now reportedly exceeds supply and it is unknown if TWRF discharges will continue to provide significant flow to Malibu Creek (Malibu Wastewater Management Study, 1992; Steve Witbeck, TWRF, pers. comm.). TWRF's goal is to reclaim all water entering the facility, but achievement of this goal is dependent upon demand for the water. Recent trends do indicate that summer demand for the water is very high. This period of peak demand coincides with the period in which discharges to Malibu Creek would have the greatest potential adverse effects, although significant impact from overflow due to winter storms also occurs. These effects are primarily associated with seasonal flow and nutrient loading.

The first of these is the fact that the...
the second is the fact that the...
the third is the fact that the...

The fourth is the fact that the...
the fifth is the fact that the...
the sixth is the fact that the...

The seventh is the fact that the...
the eighth is the fact that the...
the ninth is the fact that the...
the tenth is the fact that the...
the eleventh is the fact that the...
the twelfth is the fact that the...
the thirteenth is the fact that the...
the fourteenth is the fact that the...
the fifteenth is the fact that the...
the sixteenth is the fact that the...
the seventeenth is the fact that the...
the eighteenth is the fact that the...
the nineteenth is the fact that the...
the twentieth is the fact that the...

The twenty-first is the fact that the...
the twenty-second is the fact that the...
the twenty-third is the fact that the...
the twenty-fourth is the fact that the...
the twenty-fifth is the fact that the...
the twenty-sixth is the fact that the...
the twenty-seventh is the fact that the...
the twenty-eighth is the fact that the...
the twenty-ninth is the fact that the...
the thirtieth is the fact that the...
the thirty-first is the fact that the...
the thirty-second is the fact that the...
the thirty-third is the fact that the...
the thirty-fourth is the fact that the...
the thirty-fifth is the fact that the...
the thirty-sixth is the fact that the...
the thirty-seventh is the fact that the...
the thirty-eighth is the fact that the...
the thirty-ninth is the fact that the...
the fortieth is the fact that the...
the forty-first is the fact that the...
the forty-second is the fact that the...
the forty-third is the fact that the...
the forty-fourth is the fact that the...
the forty-fifth is the fact that the...
the forty-sixth is the fact that the...
the forty-seventh is the fact that the...
the forty-eighth is the fact that the...
the forty-ninth is the fact that the...
the fiftieth is the fact that the...

The fifty-first is the fact that the...
the fifty-second is the fact that the...
the fifty-third is the fact that the...
the fifty-fourth is the fact that the...
the fifty-fifth is the fact that the...
the fifty-sixth is the fact that the...
the fifty-seventh is the fact that the...
the fifty-eighth is the fact that the...
the fifty-ninth is the fact that the...
the sixtieth is the fact that the...

**Insert
Figure CO-2**

Insert
Figure CO-2B

**Insert
Figure CO-2C**

Insert
Figure CO-2D

1991
1992-1993

**Insert
Figure CO-2E**

**Insert
Figure CO-2F**

1991
10-01-1991

**Insert
Figure CO-2G**

3.4.4.2 Water Supply

The City of Portland is a water utility that provides water to the city and surrounding areas. The city's water supply is primarily from the Willamette River, which flows through the city. The city's water supply is also supplemented by groundwater and surface water. The city's water supply is managed by the Portland Water Bureau, which is responsible for ensuring that the city has a sufficient water supply to meet the needs of its residents and businesses. The city's water supply is also subject to various regulations and standards, including those related to water quality and water conservation. The city's water supply is a critical resource for the city and its residents, and it is important to ensure that it is managed in a sustainable and responsible manner.

3.4.4.3 Wastewater

The City of Portland is a wastewater utility that provides wastewater services to the city and surrounding areas. The city's wastewater system is primarily composed of a network of sewer lines that collect wastewater from homes and businesses. The wastewater is then transported to a wastewater treatment plant, where it is treated and discharged into the Willamette River. The city's wastewater system is managed by the Portland Water Bureau, which is responsible for ensuring that the city has a sufficient wastewater system to meet the needs of its residents and businesses. The city's wastewater system is also subject to various regulations and standards, including those related to water quality and water conservation. The city's wastewater system is a critical resource for the city and its residents, and it is important to ensure that it is managed in a sustainable and responsible manner.

The stormwater drainage system which has been constructed in the Malibu area was designed for the purpose of flood control and gave little consideration to water quality, seasonality, and destination. In addition, the system has not only transported stormwater and its associated contaminants, but has been used as an overflow "fail safe" for sewage pump stations. At present, stormwater runoff within the MCZ does not receive deliberate treatment, though certain small marshes may provide some treatment through natural processes. The stormwater drainage system within the City of Malibu therefore conveys a variety of potentially harmful contaminants to Malibu Lagoon and Santa Monica Bay.

Malibu Creek empties into Malibu Lagoon. Malibu Lagoon is a small brackish estuary of approximately 13 acres (exclusive of adjacent associated land), but is significant since it is one of only two remaining coastal marshes in Los Angeles County. The estuary provides major migratory bird habitat, fish migration and spawning habitat, and it affects adjoining water-based recreation at Surfrider Beach. The estuary is maintained by a sandbar that lies between the Malibu Creek outlet and the ocean. Periodically, the estuary is open to the ocean when creek flows have enough energy to push through the sandbar to the ocean. The estuary is also artificially opened to the ocean by the State Department of Parks and Recreation when its waters surpass 3.5 feet in depth. Due to increased surface discharges from Malibu Creek, increased baseflow during the summer, and the seasonal closure of the sand bar, the estuary experiences a variety of water quality problems which include eutrophication from nutrients, potential health risks from pathogens, rapid and/or unnatural changes in pH and salinity gradients, sedimentation and temperature.

3.2.4.2 Water Supply

The City of Malibu's water supply is provided by the Metropolitan Water District of Southern California (MWD). The MWD obtains its water from the State Water Project and the Colorado River. Wholesalers of this water in the Malibu/Santa Monica Mountains area are the Las Virgenes Municipal Water District and the West Basin Municipal Water District. These wholesalers distribute to three retailers which include the Los Angeles County Waterworks District No. 29, Silvas Park Mutual Water Company, and Las Virgenes Metro Water District. There are also a number of private wells that supply water within the City. However, the utilization of wells as a source of potable water has steadily declined since 1965, when water became available through the MWD. Although the amount of water supplied by these wells is now considered to be insignificant (Incorporation of Malibu EIR, 1989), they are sources of inexpensive water to agricultural and other interests located away from piped water service.

3.2.4.3 Groundwater

Groundwater, including underground streams and springs, is one of the least understood resources in the Malibu area. Studies conducted throughout the City of Malibu including Big Rock, the most intensively studied area in the City, have been inconclusive in determining definitive information on subsurface recharge and discharge. The difficulties in quantifying groundwater stem from the complexity of the Malibu area's subsurface geology and subsurface flow. Groundwater is often held at different levels at a given

location with each pocket of groundwater behaving differently. The amount and retention times of groundwater stored, its quality, seasonal and annual fluctuations, directions of movement and points of discharge are therefore, at best, only roughly determined (Malibu Wastewater Management Study, 1992). Due to the steep and impervious nature of the various small watersheds located within the MCZ, accompanied by the very rapid runoff of the low and variable annual rainfall, there are no local, dependable surface water supplies and very limited groundwater supplies within the MCZ. The various well and spring water sources, which had at one time provided a limited public water supply for the MCZ, have largely gone dry or have been contaminated by sea water intrusion and other pollutants and are now abandoned. The few remaining viable private well water sources are of limited capacity and serve individual homes or small developments.

The primary factors that effect the presence of groundwater in the Malibu area are seasonal and annual precipitation patterns, topography, soil and rock permeability, and faults. Many of the rock formations in the area are not conducive for holding groundwater. Groundwater can be found along the coast in alluvium, beach deposits, and terrace deposits at a depth of only a few feet (Incorporation of Malibu EIR, 1989), but depth of groundwater increases in the consolidated rock of inland areas and can reach several hundred feet. The dominant source of groundwater recharge in the City is groundwater flow from the upper portions of the watersheds. Other sources of recharge include more localized percolation of rainfall, streamflow, irrigation runoff, and septic system disposal.

3.2.5 Beach and Shoreline Resources

The City of Malibu has approximately 27 miles of coastal area. Within this coastal area, there are three distinct elements, including the inshore or shoreface (where the water breaks onto the shore); the beach or shore; and the coast (upland from the beach or shore). The City of Malibu beach and shorelines consist of several geologic forms including, bedrock, terrace deposits, artificial fill, beach sand deposits, wind blown dune sand and rip-rap.

The bedrock formations are found in either the high cliff areas (along Point Dume) or the highly fractured and broken bedrock areas (north of the fault trace at Paradise Cove) which are more prone to erosion. Terrace deposits consist of less hardened and consolidated material than the bedrock and are generally found at higher elevations on top of flat areas that overlook Malibu. Other terrace deposits are located west of Lechuza Point where the deposits extend down to the sea cliffs and bluffs of the coast. Artificial fill is located sporadically throughout Malibu, but is typically found in areas where it has been used for the construction of roadways and beach front homes. In some cases, this fill has been exposed and is susceptible to erosion. The location of the fill material is otherwise difficult to determine.

The sand supply along the Malibu coast is determined by the local littoral sediment system. There are two littoral cells along the Malibu coast: (1) the Zuma Cell west of Point Dume; and (2) the Santa Monica Cell east of Point Dume. Any consideration of coastal erosion and sedimentation for management purposes should recognize the discrete nature of the coastal process-response systems east and west of Point Dume.

The Zuma Cell is considered a distinct entity because, although linked to the Santa Barbara Cell, much of the sediment derived from the west is lost down Hueneme and Mugu submarine canyons. These canyons and several smaller offshore canyons are the ultimate sinks for sediment moving from the Santa Barbara Cell into the Zuma Cell, for very little beach-forming sediment appears to continue eastward around Point Dume. The Santa Monica Cell extends from Point Dume to Palos Verdes Peninsula and is represented by the broad arc of Santa Monica Bay which, compared to other parts of Southern California, is relatively shallow with a shelf less than 100 meters deep and extending 10-18 kilometers offshore. (A. Orme, 1992; The Malibu Coast, Appendix B, Technical Memo 10, The Malibu Wastewater Study).

Beach sand deposits are located along much of Malibu's shore zone. Although local beach sand deposits generally vary in thickness from 5 to 15 feet, Carbon beach has approximately 25 feet of sand. Wind blown dune sands also occur in Malibu, but are generally associated with only the widest beaches. Some of these dunes contain sand deposits that are 30 feet above the original beach level. The last geologic formation is rip-rap. Large quantities of rip-rap have been imported and placed at scattered locations from Topanga Beach to the Ventura County line. In most cases, the large 4 to 6 foot in diameter boulders that make up the rip-rap are used to protect the toes of the fill slopes located along the Pacific Coast Highway. Further discussion of beach and shoreline resources is provided in the Safety Element.

3.2.5.1 Environmentally Sensitive Beach and Shoreline Resources

The following areas have been identified as locations for sensitive beach and shoreline resources in the Malibu Coastal Zone:

Arroyo Sequit Creek Mouth: This rocky headland and off-shore rock is west of the City limits. However, it is affected by conditions and actions within the City. A diverse marine fauna, including mussel beds and rocky intertidal species, is located at this site. The mouth of the creek is a critical area during the annual migration of steelhead.

Beach Area Between Nicholas Bluffs and Lechuza Point: This stretch of beach is relatively undisturbed by recreational use and urban development. It supports a high diversity of habitats including tide pools, sandy beaches, beach cliffs and adjacent bluffs.

Trancas Beach Dunes: Trancas Beach Dunes are the only extensive dunes in the MCZ. This area supports a flora and fauna restricted to coastal foredunes and upper beaches. While many of the dunes are dominated by ice plant (*Carpobrotus* spp.), the outer dunes support native foredune vegetation.

Zuma Creek Mouth: The mouth of Zuma Creek supports a small freshwater estuary and associated wetland vegetation. The area also supports a diverse array of aquatic insects, amphibians and birds. Although the creek mouth is exposed to foot traffic, garbage, grading and parking facilities, there is potential for the restoration of this area to a more diverse freshwater estuary with higher value and function.

Point Dume and Paradise Cove (including Pirate's Cove, Dume Cove, Little Dume and the associated headland): Point Dume is a prominent headland which rises approximately 200 feet above the Pacific Ocean. The area contains both sandy beaches and rocky points. Access is limited in the rocky areas, thus protecting the tide pools and other rocky intertidal habitats from intensive recreational use. Sensitive coastal dune and bluff vegetation, including stands of giant coreopsis and other endangered species, exists along the bluffs and cliffs. Foot traffic in this area has led to the loss of portions of the unique dune and bluff vegetation.

Paradise Cove: Tidepools hosting a variety of sea creatures (protected as an ESHA) extend intermittently from the western end of Paradise Cove to the Headlands of Point Dume.

Latigo Point: Latigo Point supports relatively undisturbed rocky headlands, tide pools and sandy beaches which contain a diversity of marine species.

Malibu Lagoon: Several habitats including sandy beach, rocky beach, coastal dune, salt marsh, mud flats and salt-water to brackish estuary are supported by Malibu Lagoon. The site is part of the Pacific Flyway and the only estuary in Los Angeles County providing a stop-over for various migratory birds. Several species of native fishes, including the locally uncommon steelhead also utilize the estuary.

Grunion-Spawning Grounds: Grunion spawn at the western end of Decker Beach, Zuma Beach, Solstice Beach and other locations throughout the Malibu area. The spawning grounds are considered sensitive because the continued success of the species depends on the availability of the spawning habitat.

3.2.6 Marine Resources

The Malibu coastline is a relatively undisturbed coastal region where upwelling of nutrient-rich waters and a variety of habitats support highly productive and extremely diverse marine communities. The area possesses some of the best kelp bed habitat south of Santa Barbara, and the only remaining natural kelp beds on the mainline coast of Los Angeles County. These areas may be 100 times more productive than adjacent sand bottom communities and provide refuge, food, and nursery grounds for thousands of species.

Rocky outcrops alternative with sandy stretches along this coastline and are found to a depth of 600 feet. The stability of the substrate and the variety of exposures provide microhabitats for a great number of organisms. Characteristically, rocky shorelines from the lower intertidal zone to about 100 foot depth can be the most biologically active areas in the world. Rocky intertidal habitat occurs at Point Dume, Leo Carillo and Big Rock.

This coastline also possesses the only complete, undisturbed sandy beaches remaining in Los Angeles County. Although very dynamic in physical stability and, therefore, unfavorable for the development of a diverse biological community, these areas do offer habitat for a number of organisms. An important micro-community of decomposers is present. Sandy beaches provide feeding areas for many bird species. Previously, a

number of bird species nested on the sandy beaches including the snowy plover, the California least tern, and the light-footed clapper rail. In addition, the soft substrate offers a repository for eggs and nursery grounds for many species.

The Malibu shoreline remains as a remnant of what once was typical of rocky and sandy shore-line in southern California. West of Point Dume, some minor pollution does occur but the kelp is healthy. East of Point Dume there is minor to moderate pollution and kelp does not grow below 35 feet (England and Nelson, 1976; SEA1: The Malibu Coastline).

3.2.6.1 Marine Vegetation Communities

The only marine vegetation community which is described for the MCZ near-shore region is Surfweed (Thorne, 1976). This community occurs along the rocky coast below the low tide level where there is heavy surf. Only plants that can withstand the physical force of the waves can survive in this region. Common plants which occur in this community include sea-palms (*Postelsia palmaeformis*, *Eisenia arborea*), kelps (*Macrocystis pyrifera*, *Egregia laevis*, *Hesperophycus harveyanus*, *Halidrys dioica*, *Pelvetia fastigiata*), red algae (*Plocamium cartilagineum*, *Corallina officinalis*), and surf-grass (*Phyllospadix scouleri*, *Phyllospadix torreyi*).

3.2.6.2 Rare, Endangered and Threatened Species

The marine and beach area within the Malibu coastline includes the range of several endangered, rare and threatened species. The gray whale (*Eschrichtius robustus*) passes offshore in its annual migration. The southern sea otter (*Enhydra lutris nereis*) has been seen periodically off the Malibu Coast. This species has been extending its range southward and it appears to be only a matter of time before it will be established in kelp beds off the Malibu coast.

Harbor seals and sea lions which are found along the Malibu coast are afforded protection under the Marine Mammal Protection Act.

Three other species, the California least tern (*Sterna albirons bowni*), the Belding savannah sparrow (*Passerculus sandwichensis beldingi*) and the light-footed clapper rail (*Rallus longirostris levipes*), once had breeding colonies within this area. The California least tern and the light-footed clapper rail have been observed passing through, but not breeding in the area of Malibu Lagoon in recent years. The brown pelican (*Pelecanus occidentalis*) is seen in areas along the coast, such as Point Dume (LCP Research and Analysis Appendices, Los Angeles County Department of Regional Planning, 1982).

3.2.6.3 Environmentally Sensitive Marine Resources

The following areas have been identified as locations for sensitive marine resources in the Malibu Coastal Zone:

Arroyo Sequit Creek Mouth: This rocky headland and off-shore rock area support a

diverse marine fauna. A major kelp bed lies offshore extending eastward to Trancas beach.

Beach Area Between Nicholas Bluffs and Lechuza Point: This area supports offshore kelp beds. There is a small population of sea lions which haul out on the rocky portions of this stretch of beach, while grunion spawn in some of the sandy habitats.

Point Dume and Paradise Cove (including Pirate's Cove, Little Dume and the associated headlands): As shown in Figure CO-4, biologically-rich kelp beds are located offshore. Pismo Clams inhabit the reefs from the Headlands extending almost as far north as Trancas. Pismo Clam shells are often found at Pirate's Cove. Sea lions which were once common in Pirate's Cove haul out on rocky islets and offshore buoys due to the growing number of people utilizing the cove. The ecological value of Point Dume is extremely high due to the presence and proximity of the many habitats and associated species. Specifically, the offshore habitat extending from the Headlands to Malibu Lagoon is designated as an Environmentally Sensitive Habitat Area.

Paradise Cove: Relatively undisturbed rocky habitats with an abundant coverage of marine algae are present near Little Dume at the western side of Paradise Cove. These offshore reefs are considered by the State of California to be marine resources of special biological significance. Additionally, this area is an historical grunion spawning ground.

Latigo Point: Latigo Point supports relatively undisturbed rocky headlands, tide pools and sandy beaches which contain a diversity of marine species. Latigo Point is scientifically important because it has been the site of numerous field studies documenting the characteristics of marine habitats, and it is the southern limit of distribution for a variety of marine species.

Kelp Beds: There are two major kelp beds in the Malibu area. One area is located between Leo Carrillo and Trancas Beach and the second stretches east from Point Dume to the Malibu Lagoon area. An abundant and diverse fauna and flora is associated with these kelp beds.

Grunion-Spawning Grounds: Grunion spawn at the western end of Decker Beach, Zuma Beach, Solstice Beach and other locations throughout the Malibu area. The spawning grounds are considered sensitive because the continued success of the species depends on the availability of the spawning habitat.

3.2.6.4 Areas of Special Biological Significance (State Water Quality Control Board)

The most extensive natural coastline in Los Angeles County is within the City of Malibu. Marine resources along the Malibu coast include kelp beds, tide pools, marine fisheries, offshore reefs, sandy beaches, rocky headlands, sea lion haul outs, coastal dunes and isolated wetlands. In order to protect these sensitive resources, the State Water Resources Control Board (SWRCB) designated the entire coastline from Point Mugu to

Latigo Point as an Area of Special Biological Significance (ASBS). The SWRCB defines an ASBS as an area "requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable." The SWRCB has adopted water quality control plans which afford special protection to marine life in an ASBS by prohibiting waste discharge within the area. Specifically, discharge of elevated temperature wastes and discrete, point source sewage or industrial process wastes in a manner that would alter the water quality conditions from those occurring naturally are prohibited. Additionally, discharge of waste from non-point sources, including but not limited to stormwater runoff, silt and urban runoff, must be controlled to the extent practicable. Designated Areas of Special Biological Significance must also be incorporated into the basin water quality control plans prepared by the Regional Water Quality Control Board (RWQCB), and thus be used to establish waste discharge requirements in these areas.

Based on the quality of the biological resources in the ASBS, the General Plan has designated the coastline between Point Mugu and Latigo Point as an environmentally sensitive habitat area (ESHA), consistent with the resource protection language of the Coastal Act.

3.2.7 Vegetation and Wildlife Resources

The vegetation of the MCZ is the unique product of a Mediterranean climate, steep and varied topography and proximity to the Pacific Ocean. The MCZ has high ecological and species diversity which includes a number of endangered and threatened plants and animals. The location and type of vegetation in the MCZ depends largely on the type of soil and the amount of moisture available during annual period of drought from approximately April to October.

The dominant chaparral and coastal sage communities are fire successional and strongly adapted to periodic wildfires. The vegetation of the MCZ is affected by the frequency, intensity and size of fires. The modern fire pattern is significantly different than that of the past due to fire suppression and arson.

3.2.7.1 Holland Terrestrial Plant Communities

The Malibu Coastal Zone contains seven major categories of terrestrial vegetation communities, including: (a) Chaparrals; (b) Coastal Sage Scrub; (c) Oak Woodland and Forest; (d) Riparian Scrubs, Woodlands, and Forest; (e) Coastal Dune Scrub; (f) Freshwater Marsh; and (g) Coastal Brackish Marsh. These major vegetation types have been further classified as discrete plant communities that generally share characteristic species and have similar physiographic site characteristics. (Holland, Terrestrial Natural Communities of California; California Department of Fish and Game; 1986.)

The California Natural Diversity Database (NDDDB) identifies twenty-five plant communities in the Santa Monica Mountains. The plant communities, and their status by the California Department of Fish and Game, are identified in Table 3-1.

**Table 3-1: Malibu/Santa Monica Mountains Holland Plant Communities
With California Department of Fish and Game Status
(Revised July 1995)**

Communities	Rankings and Status			
	Status	Ecologically Important	Very Threatened	Threatened
<u>Coastal Plant Communities</u>				
1. Southern Coastal Bluff Scrub	S1.1		Yes	
2. Southern Foredunes	S2.1		Yes	
3. Southern Dune Scrub	S1.1		Yes	
4. Coastal Brackish Marsh	S2.1	Yes	Yes	
5. Coastal and Valley Freshwater Marsh	S2.1	Yes	Yes	
<u>Grassland</u>				
6. Valley Needlegrass Grassland	S3.1		Yes	
7. Non-native Grassland	S4			
<u>Shrublands</u>				
8. Venturan Coastal Sage Scrub	S3.1		Yes	
9. Ceanothus megacarpus Chaparral (big-pod ceanothus)	S3.2			Yes
10. Chamise Chaparral	S4			
11. Redshank Chaparral	S3.2			Yes
12. Northern Mixed Chaparral	S4			
13. Buck Brush Chaparral	S4			
14. Ceanothus crassifolius (hoaryleaf) Chaparral	S3.2			Yes
15. Scrub Oak Chaparral	S3.3			

Communities	Rankings and Status			
	Status	Ecologically Important	Very Threatened	Threatened
<u>Riparian Shrub/Woodlands</u>				
16. Southern Willow Scrub	S2.1	Yes	Yes	
17. Mule Fat Scrub	S4			
18. White Alder Riparian Forest	S4	Yes		
19. Southern Cottonwood Willow Riparian Forest	S3.2	Yes		Yes
20. Southern Coast Live Oak Riparian Forest	S4	Yes		
21. Southern Sycamore Alder Riparian Woodland	S4	Yes		
22. Coastal Freshwater Marsh				
<u>Woodlands</u>				
23. California Walnut Woodland	S2.1	Yes	Yes	
24. Coast Live Oak Woodland	S4	Yes		
25. Valley Oak Woodland	S2.1	Yes	Yes	

Key to California Department of Fish and Game Status Codes

State Code Abbreviations:

Distribution:

S1: 2,000 acres
 S2: 2,000 - 50,000 acres
 S3: 50,000 acres
 S4: Apparently Secure
 S5: Demonstrably Secure

Degree of Endangerment:

S_1: Very Threatened
 S_2: Threatened
 S_3: No Current Threats

Definitions: Very Threatened: The majority of occurrences are threatened
 Threatened: Some but not the majority of occurrences are threatened

CDFG 'Sensitive' Habitat Types: Elements with a distribution of S3 or less and a degree of endangerment of S_2 or less.

Ecologically Important: Habitat of high biological diversity or habitat necessary to sustain normal ecosystem processes.

The following describes these natural communities:

Southern Coastal Bluff Scrub: Another plant community which is associated with coastal locations is Southern Coastal Bluff Scrub. This community occurs on rocky, poorly developed soils of coastal bluffs and slopes that are exposed to salt-laden, desiccating winds. Characteristic species include a variety of woody or succulent plants that can reach three feet in height. Such as *Coreopsis gigantea*, *Atriplex centfomis*, *Eurelia californica*, *hoploppippos enicoricles*, and *H. venetrus*. This community has been significantly reduced due to beach front development and other disturbances within the MCZ and is now limited to the Point Dume area. As with many of the previously described plant communities, it is considered to be a highest priority special plant community which is in need of protection.

Southern Foredunes: Areas of sand accumulation along the coast historically supported Southern Foredunes. This community, which typically occurs on foredunes or upper beaches, is now much reduced due to urban and other development. Southern Foredunes are dominated by a variety of suffrutescent (woody but diminutively shrubby) plants that are typically less than one foot in height. Characteristic species include sand-verbena (*Abronia* spp.), silver beachweed (*Ambrosia chamissonis*) and horned sea-rocket (*Cakile maritima*) in exposed sites, while beach morning-glory (*Calystegia soldanella*) and beach evening primrose (*Camissonia cheiranthifolia*) are more common in sites less exposed to desiccating, salt and sand-bearing winds. Due to the limited remaining distribution of this community and development pressure on areas which support the community, it is identified by the California Department of Fish and Game as a highest priority special plant community which should be protected. Southern foredunes can be found at Broad Beach and some elements at Zuma Beach, Point Dume and Leo Carillo State Beach.

Southern Dune Scrub: A dense coastal scrub community of scattered shrubs, subshrubs and herbs, generally less than 1 meter tall and often developing considerable cover. Intergrades toward the coast with Southern Foredunes and away from the coast on rockier soils with Venturan Sage Scrub. Species include *Atriplex leucophylla*, *Croton californicus*, *Ericamerica ericoides*, *Haplopappus venetus vernonioides*, *Lupinus chamissonis*, *Opuntia littoralis* and *Rhus integrifolia*. With the notable exception of the El Segundo Dunes, this community has been virtually eliminated from mainland southern California. Other small examples persist in Baja California, the Channel Islands and Point Dume.

Coastal Brackish Marsh: Malibu Lagoon is classified as a Coastal Brackish Marsh. This community type usually occurs at the interior edges of coastal bays and estuaries or in coastal lagoons. The community is dominated by perennial, emergent, monocots which are characteristic of both coastal Freshwater Marsh and Southern Coastal Salt Marsh. Although salinity in this community often varies considerably it is more often brackish due to substantial freshwater input and limited marine influence in the summer months due to the development of a sand barrier between the estuary and the Ocean. Brackish marsh vegetation, like that of southern coastal salt marshes, includes a variety of halophytic (salt-tolerant) species. At Malibu Lagoon, the dominant species

are Saltgrass (*Distichlis spicata*), jaumea (*Jaumea carnosa*) and pickleweed (*Salicornia virginica*) (Manion and Dillingham, 1989). The distribution of brackish and coastal salt marshes has been severely restricted along the southern California coast and much of the habitat has been degraded. This community is, therefore, considered a highest priority community in need of protection.

Freshwater Marsh: Coastal Freshwater Marsh typically occurs in small pockets within the floodplains of the MCZ's drainages. These areas are permanently flooded or saturated with freshwater and typically are dominated by rushes (*Juncus* spp.), tules (*Scirpus* spp.) and cattail (*Typha* spp.). The marsh wetlands which occur at the mouths of the largest watershed, including Topanga, Trancas, Zuma and Arroyo Sequit, can be characterized as seasonal estuaries. These wetlands are exposed to marine tidal influences during the winter months, but are isolated from the Ocean as stream flows decline and sand barriers develop. Despite the periodic influences of salt water, these habitats are characterized as predominately freshwater wetland habitats. The Santa Monica Bay Restoration Project's "Wetland Inventory and Restoration Potential" report identified the estuary at Zuma Beach as having freshwater vegetation (see page 4 of the Appendix of that report).

Coastal Freshwater Marsh also develops in isolated depressions which are fed by springs or seeps. Although areas of this type that support the community are less common in the MCZ, there is a large Coastal Freshwater Marsh located at the mouth of an unnamed canyon north of Trancas Canyon (Josselyn et al, 1992). Due to urban development, stream channelization for flood control, and alteration of hydrological input, this community has experienced a significant reduction in distribution and is considered a highest priority community in need of protection.

Valley Needlegrass Grassland: This native grassland is characterized by perennial, tussock-forming valley needlegrass (*Stipa pulchra*), but often supports a cover of various other native and introduced annuals which provide greater cover than the needlegrass. This community usually occurs on fine-textured soils that are moist or even waterlogged during winter when germination occurs, but are very dry during summer. This community is considered to be very threatened due to the limited distribution of remaining stands, competition with introduced annual grasses, and development pressure on areas which support the community. The community is identified by the California Department of Fish and Game as a highest priority special plant community which is in need of protection.

Non-Native Grassland: Non-native Grassland occupies many of the areas which would have historically supported Valley Needlegrass Grassland. This community consists of a dense to sparse cover of annual grasses which are more effective competitors than native bunchgrasses when areas are overgrazed or regularly disturbed in other ways. The community is also often associated with numerous species of native annual wildflowers, especially in years of favorable rainfall. Non-native Grassland occurs on the same soils that support Valley Needlegrass Grassland and often intergrades with Coast Live Oak Woodland much as the native

grassland does. Although not considered a rare or threatened community, this plant association provides important wildlife habitat and is now much reduced in distribution in Los Angeles County due to agricultural and urban development.

Coastal Sage Scrub: The Coastal Sage Scrub community is represented by Venturan Coastal Sage Scrub. This community is characterized by low, mostly soft-woody shrubs that are 0.5 to 2 meters tall. Crowns in this community often touch and in some areas there is typically bare ground underneath and between shrubs (while in other areas there is an understory). Common plants in this community include California sagebrush (*Artemisia californica*), black sage (*Salvia mellifera*), purple sage (*Salvia leucophylla*), California encelia (*Encelia californica*), deer weed (*Lotus scoparius*), and California buckwheat (*Eriogonum fasciculatum*). This community is considered to be a sensitive plant community type by the CDFG due to development pressure on areas which support the community type.

Chaparral: The local chaparral community is principally Chamise Chaparral. This one to three meter tall chaparral is overwhelmingly dominated by chamise (*Adenostoma fasciculatum*). Other associated species such as Eastwood's manzanita (*Arctostaphylos glandulosa*), big-pod ceanothus (*Ceanothus megacarpus*), mountain mahogany (*Cercocarpus betuloides*), and toyon (*Heteromeles arbutifolia*) generally contribute little to total cover. This community occurs on the shallow, dry soils of slopes and ridges and is characterized by a relatively frequent fire cycle (every 10 to 15 years). Because of this frequent fire cycle, many species within the community respond to fire by stump and root sprouting and by germination of fire stimulated seeds. Mature stands, not recently affected by fire, are often densely interwoven and support very little herbaceous understory.

Another relatively common chaparral which occurs in the MCZ is big-pod ceanothus chaparral. This tall, dense chaparral is strongly dominated by big-pod ceanothus. This species does not stump sprout, but is apparently long lived in the absence of fire. The community typically occurs on dry slopes with shallow, rocky soils and intergrades with Venturan Coastal Sage Scrub and Chamise Chaparral on drier sites and Coast Live Oak Woodland on moister sites. Less common chaparrals that occur in the MCZ include hoary-leaf ceanothus chaparral, Redshank Chaparral, Scrub Oak Chaparral, and Northern Mixed Chaparral. These communities are each more fully described by Holland in the State Department of Fish and Game's Preliminary Descriptions of the Terrestrial Natural Vegetation Communities of California (1986).

Riparian Woodland, Scrub, and Forest: Southern Coast Live Oak Riparian Forest is similar to Coast Live Oak Woodland, but is characterized by a denser canopy which is largely closed. This community typically occurs in well-shaded valley bottoms and along low, adjacent slopes. It provides resources which are similar to the resources provided by Coast Live Oak Woodland. The California Department of Fish and Game identifies this as a highest priority special plant community in need of protection. Other local communities which are largely associated with drainages include a variety of riparian woodland, forest, and scrub communities. These communities include Southern Cottonwood Willow Riparian Forest, Southern Sycamore Alder Riparian

Woodland, White Alder Riparian Forest, Southern Willow Scrub, and Mule Fat Scrub. Distinctions between these communities are often vague as they intergrade with one another, but species composition and physiographic characteristics often allow these riparian communities to be identified to type. Each of these communities with the exception of Mule Fat Scrub are considered to be ecologically important.

White Alder Riparian Forest is a medium to tall deciduous streamside forest dominated by white alder (*Alnus rhombifolia*). Understories are shrubby, deciduous and typically represented by willows (*Salix* spp.) and mule fat (*Baccharis salicifolia*). This community is best represented along the high gradient reaches of perennial steep-sided drainages and as a consequence generally occurs as a very narrow riparian corridor.

Southern Sycamore Alder Riparian Woodland is a tall deciduous streamside woodland that is dominated by western sycamore (*Platanus racemosa*) and occasional white alders. These woodland stands seldom form closed canopies and may even appear as trees scattered in a shrubby thicket. The community is typically associated with rocky stream beds that are subject to high intensity flooding. The intermittent nature of most of the drainages within the MCZ favors western sycamore as the dominant species, but white alder increases in abundance on more perennial streams.

Southern Cottonwood Willow Riparian Forest is a tall, open, deciduous riparian forest dominated by Fremont's cottonwood (*Populus fremontii*), western sycamore, and various tree willows (*Salix* spp.). Understories are usually shrubby willows. This community usually occurs on the lower gradient reaches of perennial drainages where it is best represented in subirrigated canyon bottoms and overflow areas as well as along stream sides. The community is perhaps not differentiable from Southern Cottonwood Sycamore Riparian Forest with the exception that this latter community may be characterized as containing a higher proportion of western sycamores and is more likely to occur on sub-perennial or intermittent streams. Cottonwood is relatively uncommon in the Malibu Coastal Zone and neither community type is abundant.

Southern Willow Scrub occurs as a dense, deciduous riparian thicket dominated by several species of willows. Scattered emergent Fremont's cottonwoods and western sycamores are also often present. The community occurs along the lower gradient reaches of drainages where sandy or fine alluvium is deposited. This early seral stage requires frequent disturbance from flooding to prevent succession to Southern Cottonwood Willow Riparian Forest or Southern Cottonwood Sycamore Riparian Forest.

Mule Fat Scrub is a tall, herbaceous riparian scrub that is strongly dominated by mule fat. This early seral community is maintained by frequent flooding. In the absence of such flooding the community succeeds to a variety of cottonwood or sycamore-dominated forests or woodlands. The community typically occurs along intermittent stream channels with fairly coarse substrate and moderate depth to the water table. It often occurs as a patchy understory in light gaps in cottonwood or sycamore-dominated riparian woodlands.

California Walnut Woodland: California Walnut Woodland is similar to Coast Live Oak Woodland but with a more open tree canopy locally dominated by California walnut (*Julous californica*). The more open canopy allows a more extensive development of a grassy understory. The community typically occurs on relatively moist, fine-textured soils of valley slopes and canyon bottoms, but may also occur around rocky outcrops of slopes and canyon walls. Drier, rockier sites often intergrade to Venturan Coastal Sage Scrub, while moister sites intergrade to Coast Live Oak Woodland or Southern Coast Live Oak Forest. This community is also identified as a highest priority special plant community which is in need of protection by the California Department of Fish and Game.

Oak Woodlands: Oak Woodlands within the MCZ are primarily Coast Live Oak Woodland. This community typically occurs on north-facing slopes and shaded ravines in the Malibu area. On drier sites, Coast Live Oak Woodland intergrades with Venturan Coastal Sage Scrub and Chamise Chaparral. As the name implies, this oak woodland community is dominated by coast live oak (*Quercus agrifolia*). On deeper, bottom land soils and along larger streams, this community intergrades to Southern Coast Live Oak Riparian Forest. Oak woodlands are locally important because they provide a variety of food, shelter, shade, and nesting site resources which are not provided by other, more widely distributed communities. Valley Oak Woodland occurs on the interior valley and coastal slopes, frequently on the valley bottom on deep, well drained alluvial soils.

3.2.7.2 Wildlife Habitat

The Malibu Coastal Zone (MCZ) supports a rich and diverse fauna of mammals, reptiles, amphibians, birds and invertebrates. Sufficient intact wildland habitat still remains in the MCZ and throughout the Santa Monica Mountains to support almost the entire complement of wildlife native to the Santa Monica Mountains, including large mammals such as the mountain lion, bobcat, coyote and deer.

Each of the vegetation communities of the MCZ provide wildlife habitat. Although each community provides essential habitat parameters for certain species, some of these communities provide higher value habitat or habitat for a wider diversity of species. The location of environmentally sensitive resource areas which function as important wildlife habitat are displayed in Figure CO-3.

Riparian scrubs, woodlands and forests are often characterized as having the greatest biological diversity and the highest productivity of all California wildlife habitats. Riparian vegetation communities provide shade, food, cover, breeding habitat, water and dispersal and migration corridors for many mammal species, bird, reptile, amphibian, fish, and invertebrate. A significant number of wildlife species are found only in riparian habitats. Twenty-five percent of California mammals, 80 percent of amphibians, and 40 percent of reptiles are limited to or dependent upon riparian zones, and more than 135 species of California birds depend upon or prefer riparian habitats.

Oak woodland and forest provides many of the same habitat parameters as riparian habitats. The most notable exception is the availability of water. Oak woodland and forest also improves the wildlife habitat value of other adjacent vegetation communities since species which occur in grasslands, chaparral or scrub make significant use of the shade, food and cover of adjacent oak habitat. Significant stands of oak woodland and forest have been mapped in the Malibu Local Coastal Program (1986) (see Figure CO-3).

Coastal sage scrub is a community which lacks the total species diversity of the two previously described wildlife habitats, but which is none-the-less important to discuss due to its significant reduction during the last forty years. Estimates place the extant coastal sage scrub at between 10 and 30 percent of the historic distribution of the community. As a consequence at least 35 species of California wildlife associated with coastal sage scrub are considered to have sensitive status due to the limited and often fragmented distribution of remaining areas of this community (Murphy, 1992). A number of these species occur or potentially occur in the MCZ. The sensitive animal species associated with Southern California's coastal sage scrub include the following: Southern California rufous-crowned sparrow, Bell's sage sparrow, California horned lizard, San Diego horned lizard, Coastal western whiptail, Coast patch-nose snake, Coastal Rosy boa, Southwestern pond turtle.

Freshwater marsh is a habitat which has been severely reduced throughout California. Within the MCZ this habitat may have never been very extensive with the exception of occurrences at the mouths of the larger drainages. Many of the areas which historically supported this habitat have been filled and developed or have been altered due to channelization and other flood control activities. The current wildlife habitat value of most areas in the MCZ supporting this community are is limited due to the extent and degradation of the habitat. It should be noted however that the habitat and water quality values and functions of this community can be restored and expanded with proper planning and implementation. Efforts of this type are important because the year-round water and vegetative cover provided by freshwater marsh is important to many wetland-inhabiting species of wildlife.

Coastal brackish marsh in the MCZ occurs only at Malibu Lagoon. The estuary provides important wildlife habitat for a variety of species including resident and migratory birds, resident and migratory fish, and a number of brackish and saltwater species of invertebrates. Bird diversity and abundance is greatest during January to March when northern breeding species which winter in the area are attracted to the predictable fish and invertebrate resources of the estuary. Species which are typically observed during winter include a variety of gulls, dabbling and diving ducks, fish-eating divers (i.e. cormorants, loons and mergansers), plunge divers (i.e. terns and belted kingfisher), and long-legged waders (i.e. herons and egrets). Although the abundance and diversity of bird species declines from March to August there is still significant use of the estuary during this time. During surveys conducted from April 1987 to March 1988 a total of 151 species of birds were recorded at Malibu Lagoon (Manion and Dillingham, 1989).

Figure 10.1

The estuary also provides habitat for fish. Twenty-nine species of native and non-native fish have been recorded in the estuary (Swift, 1982). The estuary has been identified as a breeding and nursery ground for several species of coastal fish including California halibut (*Paralichthys californicus*). Many species utilize coastal estuaries as breeding and nursery grounds because of abundant food, warmer water temperatures and reduced competition or predation from other fishes. Species which appear to be most abundant in the estuary include California killifish (*Fundulus parvipinnis*), topsmelt (*Atherinops affinis*), arrow goby (*Clevelandia ios*) and staghorn sculpin (*Leptocottus armatus*). These four species represented over 98 percent of individuals accounted for during studies conducted in 1987-1988 (Manion and Dillingham, 1989).

Malibu Lagoon provides habitat for the Tidewater goby (*Eucyclogobius newberryi*), a federally listed endangered species. Malibu Lagoon has been identified as a critical habitat component in the life cycle of steelhead (*Oncorhynchus mykiss*) which spawn in Malibu Creek. Malibu Creek is the southernmost run of the steelhead. Juvenile steelhead enter the estuary prior to continuing on to the ocean. The time spent in the brackish waters of the estuary allows the juvenile steelhead the necessary time to transition physiologically from freshwater to saltwater. Historically, the steelhead stayed in the estuary until winter storms opened the estuary to the ocean. It is unknown what effect the aseasonal input of freshwater to the estuary and the artificial opening of the estuary to the ocean have had on the Malibu Creek steelhead population, but it can be assumed that the effects have been deleterious. There is evidence that Malibu Creek steelhead has experienced dramatic decreases in its population. During 1987-1988 only one adult steelhead is known to have been recorded from Malibu Creek (Jensen, 1989).

In addition to the habitat provided by vegetation communities, there are a variety of other natural areas which provide habitat for local wildlife. These areas include habitat provided by drainages and ponds, rocky and sandy intertidal zones, and offshore rocks and islets.

Freshwater aquatic habitat is limited within the MCZ, due to the short rainy season and the steep topography. Most local drainages typically contain intermittent streams which have no surface flow for up to eight months of the year. These intermittent streams, as well as more perennial drainages, provide important habitat for a variety of aquatic or semi-aquatic amphibians, reptiles, fish and invertebrates. Although the presence of surface water in the MCZ is typically seasonal, the species which rely on this resource have evolved in response to the seasonal precipitation pattern. Many of the species which utilize local streams, migrate or move from other adjacent habitats to these drainages when they have surface flow or pooled water (i.e. anurans, California newt, steelhead). Other species such as the native arroyo chub (*Gila orcutti*) are resident in the perennial reaches of the streams.

Freshwater ponds also provide aquatic habitat within the MCZ. These bodies of water support many of the same species as local drainages and provide a source of water for terrestrial species. Freshwater ponds are found in Solstice, Corral, Trancas and Zuma Canyons and at Nicholas Flats (Sarah Dixon, Malibu General Plan Task Force, pers. comm.).

The MCZ contains a variety of rocky and sandy intertidal habitats. These areas support a diversity of marine invertebrates which in turn support many species of coastal birds. Sandy intertidal habitats on Malibu beaches also provide spawning habitat for grunion.

Offshore rocks and islets provide nesting sites and refuge for marine mammals, and coastal and pelagic birds. These areas are generally inaccessible to humans and domestic animals and as such are usually secure from disturbance from human activities. These resources are used as haul outs by California sea lions (*Zalophus californianus*) and as breeding sites by gulls (*Larus* spp.) and cormorants (*Phalacrocorax* spp.). These resources also often provide habitat for shorebirds which feed in rocky intertidal habitats.

3.2.7.3 Rare, Endangered or Threatened Species

Sensitive species within the MCZ are here identified as those plants and animals that are considered rare, threatened, or endangered by state or federal agencies, thereby requiring special protection; see Tables 3-2 and 3-3. Many of these species are currently protected by the state and federal Endangered Species Acts. Other species are protected by provisions of the Fish and Game Code of California as fully protected species. Species which do not receive protection from the aforementioned regulations, but which are experiencing local and regional population declines, are often considered or identified as candidates for listing under the state and federal Endangered Species Acts. The California Department of Fish and Game maintains a statewide inventory on sensitive threatened plant and animal species. These species receive limited protection through mitigation of

impacts to the species under the California Environmental Quality Act (CEQA.) Many of the sensitive species in Malibu are associated with coastal wetland and strand habitats which are becoming increasingly rare biotic communities due to coastal development. Many other sensitive species within the MCZ are associated with riparian vegetation communities.

3.2.8 Identification of Significant Natural Resources

3.2.8.1 Prior Inventories and Evaluations of Sensitive Biological Resources

The significant biological resource areas of the MCZ have been previously identified in the Los Angeles County General Plan, the Malibu/Santa Monica Mountains Interim Area Plan, and the Malibu Local Coastal Program Land Use Plan (Malibu LCP LUP). Additionally, the Regional Water Quality Control Board (RWQCB) identified a portion of the Malibu coastline as a significant biological resource area.

**Table 3-2: Rare, Threatened or Endangered Animals
Potentially Occurring in the Santa Monica Mountains
(July 1995)**

Species	Status of Species ¹		
	Federal Status	State Status	Santa Monica Mountains Status
MAMMALS			
<u>Euderma maculatum</u> Spotted Bat	C2	CSC	
<u>Eumops percis californicus</u> Greater Western Matiff Bat	C2	CSC	
<u>Macrotus californicus</u> California Leaf-nosed Bat	C2	CSC	
<u>Myotis lucifugus occultus</u> Occult Little Brown Bat	C2	CSC	
<u>Pelcotus townsendii townsendii</u> Pacific Western Big-eared Bat	C2	CSC	
<u>Reithrodontomys megalotus limicola</u> Southern Marsh Harvest Mouse	C3	CSC	
<u>Sorex ornatus salicornicus</u> Salt Marsh Ornate Shrew	C2	CSC	
<u>Taxidea taxus</u> American Badger			
<u>Lepus californicus bennettii</u> Black-tailed Hare	C2		
<u>Bassariscus astutus</u> Ringtail		CP	
<u>Mustela frenata</u> Long-Tailed Weasel			U
<u>Zelis concolor</u> Mountain lion			U
BIRDS			
<u>Ixobrychus exilis hesperis</u> Western Least Bittern	C2	CSC	
<u>Pelecanus erythrorhynchos</u> American White Pelican		CSC	
<u>Pelecanus occidentalis californicus</u> Brown Pelican	FE	CE	

Species	Status of Species ¹		
	Federal Status	State Status	Santa Monica Mountains Status
<u>Histrionicus histrionicus</u> Harlequin Duck	C2	CSC	
<u>Gymnogyps californianus</u> California Condor	FE	CE	
<u>Haliaeetus leucocephalus</u> Bald Eagle	FE	CE	
<u>Aquila chrysaetos</u> Golden Eagle		CSC	
<u>Accipiter cooperli</u> Cooper's Hawk		CSC	
<u>Pandion haliaetus</u> Osprey		CSC	
<u>Elanus caeruleus</u> Black-shouldered Kite		CP	
<u>Circus cyaneus</u> Northern Harrier		CSC	
<u>Accipiter striatus</u> Sharp-shinned Hawk	C2	CSC	
<u>Buteo swainsoni</u> Swainson's Hawk		CT	
<u>Buteo regalis</u> Ferruginous Hawk	C2		
<u>Falco peregrinus anatum</u> American Peregrin Falcon	FE	CE	
<u>Lanius ludovicianus</u> Loggerhead Shrike	C2		
<u>Dendroica petechia brewsteri</u> Yellow Warbler		CSC	
<u>Aimophila ruficeps canescens</u> Southern California Rufous-crowned Sparrow	C2		
<u>Amphispiza belli belli</u> Bell's Sage Sparrow	C2		
<u>Ardea herodias</u> Great Blue Heron		SA (for breeding habitat)	

Species	Status of Species ¹		
	Federal Status	State Status	Santa Monica Mountains Status
<u>Nycticorax nycticorax</u> Black-crowned Night-heron		SA (for breeding habitat)	
<u>Oreortyx pictus</u> Mountain Quail	C2		
<u>Tyto alba</u> Barn Owl			SC
<u>Asio otus</u> Long-Eared owl		CSC	
<u>Melanerpes lewis</u> Lewis' Woodpecker			SC
<u>Empidonax traillii extimus</u> Southwestern Willow flycatcher		CSC	Transient
<u>Sialia mexicana</u> Western bluebird	S		SC
<u>Icteria virens</u> Yellow-Breasted Chat		CSC	potential transient
REPTILES AND AMPHIBIANS			
<u>Clemmys marmorata pallida</u> Southwestern Pond Turtle	C2	CSC	
<u>Phrynosoma coronatum blainvillei</u> San Diego Horned Lizard	C2	CSC	
<u>Phrynosoma cornatum frontale</u> California Horned Lizard	C2	CSC	
<u>Cnemidophorus tigris multiscutatus</u> Coastal Western Whiptail	C2		
<u>Anniella pulchra pulchra</u> San Diego Mountain King Snake	C2	CSC	
<u>Lichanura trivirgata roseofusca</u> Coastal Rosy Boa	C2		
<u>Salvadora hexalepis virgultea</u> Coast Patch-nosed Snake	C2	CSC	
<u>Thamnophis hammondi</u> Two-striped Garter Snake	C2	CSC	
<u>Ensantina eschscholtzii</u> Ensantina			u

Species	Status of Species ¹		
	Federal Status	State Status	Santa Monica Mountains Status
<u>Anniella p. pulchra</u> Silvery Legless Lizard			U
<u>Aneides lugubris</u> Arboreal Salamander			u
<u>Leptotyphlops humilis</u> Southwestern Blind Snake			u
<u>Thamnophis sirtalis infernalis</u> California Red-Sided Garter Snake			u
<u>Coluber constrictor mormon</u> Western Yellow-Bellied Racer			u
<u>Masticophis flagellum</u> Red Coastwhip			u
<u>Diadophus punctatulus modestus</u> San Bernardino Ringtail snake	C2		
<u>Bufo microscaphus californicus</u> Southwestern Arroyo Toad	FE	CSC	
<u>Rana aurora draytoni</u> California Red-legged Frog	FPE	CSC	Extirpated
FISHES			
<u>Eucyclogobius newberryi</u> Tidewater Goby	FE	CSC	
<u>Oncorhynchus mykiss</u> Steelhead trout	FPE		
INVERTEBRATES			
<u>Euphydryas editha guino</u> Wright's Checkerspot Butterfly	FPE		Extirpated
<u>Lycaena arota nubila</u> Clouded Tailed Copper Butterfly	C3		
<u>Panoguina errans</u> Salt Marsh Skipper	C2		
<u>Satyrium auretorum fumosum</u> Santa Monica Mountains Hairstreak	C2		
<u>Brennania belkini</u> Belkins Dune Tanid Fly	C2		

Species	Status of Species ¹		
	Federal Status	State Status	Santa Monica Mountains Status
<u>Neduba longipennis</u> Santa Monica Shieldback Katydid	C2		U
<u>Proceratium californicum</u> Valley Oak Ant	C2	SA	
<u>Trigonoscute dorothea dorothea</u> Dorothy's El Segundo Dune Weevil	C2		
<u>Carolella busckana</u> Busck's Gallmoth	C2		
<u>Zerene eurydice</u> California Dogface	S		locally sensitive (Calif. state insect)
<u>Danaus plexippus</u> Monarch		SA (threats to winter roost sites)	

¹CODE

Federal Status

FE Endangered

FP Proposed - proposed regulation published in the Federal Register, no final rule.

C Candidate - under consideration for listing, but yet to be the subject of a final rule.

C1 - substantial data exist to support candidacy

C2 - data suggest listing is possibly appropriate but incomplete

C3 - non-candidates, but appeared on previous lists

C3A - extinct

C3B - taxonomically invalid

C3C - too widespread, currently not threatened

S Sensitive - (USDI: FWS, 1986)

State Status Codes

CE = California endangered

CP = California protected

CSC = California special concern (CDFG, 1987)

CT = California threatened

SA = Special animal (CDFG, 1987)

Santa Monica Mountains Status

U = uncommon (USDI: NPS 1982)

u = uncommon (DeLisle, et al., 1986)

SC = Special concern (Tate, 1986)

**Table 3-3: Rare, Threatened and Endangered Plant Species
of the Santa Monica Mountains
(July 1994)**

<i>Abronia maritima</i> (Nyctaginaceae) Red sand verbena. Perennial herb. CNPS: 4 R-E-D Code: 1-2-2 State/Fed status: - /PE	CoDns. Pt. Dume, west.
<i>Astragalus brauntonii</i> (Fabaceae) Braunton's milk-vetch. Perennial herb. (carbonate) CNPS: 1B R-E-D Code: 3-2-3 State/Fed status: - /PE	Dist. soil, fire breaks, burns, Temescal, Mal Cyns., limestone endemic. Topanga
<i>A. psychostachyus</i> var. <i>lanosissimus</i> (Fabaceae)** Ventura marsh milk-vetch. Perennial herb. CNPS: 1A Last seen: 1967 State/Fed status: - /C2*	Coastal salt marsh, Mugu, Presumed Extirpated throughout
<i>A. tener</i> var. <i>titi</i> (Fabaceae) * Coastal dunes milk-vetch. Annual herb. CNPS: 1B R-E-D Code: 3-3-3 State/Fed status: CE /C1	Vernal, moist clay flats, Santa Monica(FISMM) CBSCr (sandy), CoDns (CNPS Invn) Presumed extirpated in LAX Co.
<i>Atriplex coulteri</i> (Chenopodiaceae) Coulter's saltbush. Perennial herb. CNPS: 1B R-E-D Code: 2-2-2 State/Fed status: CEQA /- or clay (CNPS Invn)	Coastal bluffs nr. Pt. Dume (FISMM). CBSCr, CoDns, CoScr, VFGrs, alkaline
<i>Baccharis malibuensis</i> (Asteraceae) Listing pending publication of name.	Shaded canyons. Malibu baccharis. Shrub.
<i>Baccharis plummerae</i> ssp. <i>plummerae</i> (Asteraceae) Plummer's baccharis. Shrub. CNPS: 4 R-E-D Code: 1-1-3 State/Fed status: CEQA? / -	Shaded canyons near coast
<i>Boykinia rotundifolia</i> (Saxifragaceae) Round-leaved boykinia. Perennial herb. CNPS: 4 R-E-D Code: 3-1-1 State/Fed status: CEQA? /-	Moist soil nr. streams, lower Mal. Cyn. Mesic Chpl, RpWdl.
<i>Calandrinia breweri</i> (Portulacaceae) Brewer's calandrinia. Annual herb. CNPS: 4 R-E-D Code: 1-1-2 State/Fed status: CEQA? / -	Dist. sites, burns. Scattered throughout (FISMM). Chpl, CoScr / dist sites, burns. Wide dist., but uncommon everywhere (CNPS Invn)
<i>Calandrinia maritima</i> (Portulacaceae) Seaside calandrinia. Annual herb. CNPS: 4 R-E-D Code: 1-2-1 State/Fed status: CEQA? / -	Sand or sea bluffs/CSS, Santa Monica (FISMM) CBSCr, VFGrs / sandy (CNPS Invn)
<i>Calochortus catalinae</i> (Liliaceae) Catalina mariposa lily. Perennial herb (bulbiferous) CNPS: 4 R-E-D Code: 1-2-3 State/Fed status: CEQA? / -	Meadows. VFGrs.
<i>C. plummerae</i> (Liliaceae) Plummer's mariposa lily. Perennial herb (bulbiferous) CNPS: 1B R-E-D Code: 2-2-3 State/Fed status: - / C2	Scattered and local on rocky slopes at low elev. away from coast, throughout (FISMM). Chpl, Wdl, CoScr, LCFrs, VFGrs (CNPS Invn).

Table 3-3: Rare, Threatened and Endangered Plant Species
of the Santa Monica Mountains
(July 1994)
(Continued)

<i>Camissonia lewisii</i> (Onagraceae) Lewis's evening primrose. Annual herb. CNPS: 3 R-E-D Code: ?-?-2 State/Fed status: CEQA? / -	Point Dume (FISMM) CoBSscr, CoDns, CoScr, VFGrS / sandy or clay (CNPS Invn).
<i>Cercocarpus betuloides</i> ssp. <i>blancheae</i> (Rosaceae) Island mountain-mahogany. Shrub. CNPS: 4 R-E-D Code: 1-1-3 State/Fed status: CEQA? / -	1800', Saddle Rock. Chpl.
<i>Chamaebatia australis</i> (Rosaceae) Southern mountain misery. Shrub. CNPS: 4 R-E-D Code: 1-2-1 State/Fed status: CEQA? / -	Rare on no. facing slopes, Rocky Oaks (FISMM) Chpl.
<i>Chorizanthe parryi</i> var. <i>parryi</i> (Polygonaceae) Parry's spineflower. Annual herb. CNPS: 3 R-E-D Code: ?-2-3 State/Fed status: - / C2	NDDDB rept. in Latigo Cyn.
<i>Cordylanthus maritimus</i> ssp. <i>maritimus</i> (Scrophulariaceae) Salt marsh bird's beak. Annual herb (hemiparasitic). CNPS: 1B R-E-D Code: 2-2-2 State/Fed status: CE / FE	Coastal salt marsh - Mugu. (Extirpated Topanga quad). No record for Malibu Lagoon.
<i>Coreopsis gigantea</i> (Asteraceae) Giant coreopsis. Herbaceous perennial (succulent). Not listed - too common. Indicator of CoBSscr.	CoBSscr. Southern extreme of distribution.
<i>Delphinium parryi</i> ssp. <i>blochmaniae</i> (Ranunculaceae) Dune larkspur. Perennial herb. CNPS: 1B R-E-D Code: 3-2-3 State/Fed status: - / C2	Chpl (maritime), CoDn Long Grade Cyn, Camarillo.
<i>Dichondra occidentalis</i> (Convovulaceae) CNPS: 4 R-E-D Code: 1-2-1 State/Fed status: - / C3c	Locally abundant, inconspicuous. bare slopes after fire. Western dichondra. Creeping perennial herb.
<i>Dithyrea maritima</i> (Brassicaceae) Beach spectaclepod. Perennial herb (rhizomatous). CNPS: 1B R-E-D Code: 3-3-2 State/Fed status: CT / C1	Sand dunes-Santa Monica (FISMM). Co Dns, CoScr (sandy) Extirpated in SMM's?
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i> (Crassulaceae) Blochman's dudleya. Herbaceous perennial (succulent). CNPS: 1B R-E-D Code: 3-3-3 State/Fed status: - / C2	Stony open slopes often in clay; Conejo common nr. Grade, rare Pt. Dume; Extirpated Malibu Beach, Santa Monica Canyon. (CoBSscr, CoScr, VFGr)
<i>D. caespitosa</i>	Southern limit of Pt. Dume. Sandy cliffs
<i>D. cymosa</i> ssp. <i>marcescens</i> (Crassulaceae) Marcescent dudleya. Herbaceous perennial (succulent). CNPS: 1B R-E-D Code: 3-2-3 State/Fed status: CR / PT	Sheer volcanic rock surfaces, adjacent to perr. streams. Malibu Creek St. Park. Volcanic Chpl.
<i>D. cymosa</i> ssp. <i>ovatifolia</i> (Crassulaceae) Santa Monica Mountains dudleya. Herbaceous perennial (suc). CNPS: 1B R-E-D Code: 2-2-3 State/Fed status: - / PT	Exposed no. facing slopes Westlake to Agoura. Deep canyon bottoms, lower Malibu Cyn and Topanga cyn. Volcanic Chpl, CoScr.

**Table 3-3: Rare, Threatened and Endangered Plant Species
of the Santa Monica Mountains
(July 1994)
(Continued)**

<i>Dudleya multicaulis</i> (Crassulaceae) Many stemmed dudleya. Herbaceous perennial (succulent) CNPS: 1B R-E-D Code: 1-2-3 State/Fed status: - / C2	Santa Monica, Hollywood. Chpl, CoScr, VFGrs / often clay. Extirpated in SMM's?
<i>D. abramsii</i> ssp. <i>parva</i> (Crassulaceae) Conejo dudleya. Herbaceous perennial (succulent). CNPS: 1B R-E-D Code: 3-2-3 State/Fed status: - / PT	Conejo Grade, Simi Hills. CoScr, VFGrs / rocky, clay
<i>D. verityi</i> (Crassulaceae) Verity's dudleya. Herbaceous perennial (succulent). CNPS: 1B R-E-D Code: 3-2-3 State/Fed status: - / PT	Lower Conejo Grade, Ventura Chpl, CoScr, CmWdl / volcanic.
<i>Eriogonum crocatum</i> (Polygonaceae) Conejo buckwheat. herbaceous perennial. CNPS: 1B R-E-D Code: 2-2-3 State/Fed status: CR / C2	Conejo grade, volcanic outcrops. Santa Rosa Valley Lake. Eleanor. Chpl, CoScr, VFGrs / Conejo volcanic outcrops.
<i>Erysimum insulare</i> ssp. <i>suffrutescens</i> (Brassicaceae) Suffrutescent wallflower. Perennial herb. CNPS: 4 R-E-D Code: 1-2-3 State/Fed status: CEQA? / -	Rare, Pt. Mugu. CBScr, CoDns, CoScr.
<i>Gallium cliffonsmithii</i> (Rubiaceae) Santa Barbara bedstraw. Perennial herb. CNPS: 4 R-E-D Code: 1-1-2 State/Fed status: CEQA? / -	Oak woodland.
<i>Hemizonia minthornii</i> (Asteraceae) Santa Susana tarweed. Subshrub. CNPS: 1B R-E-D Code: 2-2-3 State/Fed status: CE / C1	Rocky outcrops, CoScr, Chpl.
<i>Hordeum intercedens</i> (Poaceae) VnIP, Vernal barley. Annual herb. CNPS: 3 R-E-D Code: ?-2-2 State/Fed status: CEQA? / -	Rill on dry adobe soil, NE slope of Conejo Mtn.. VFGrs.
<i>Juglans californica</i> var. <i>californica</i> (Juglandaceae) Southern California black walnut. Tree. CNPS: 4 R-E-D Code: 1-2-3 State/Fed status: CEQA? / -	Southern Oak Woodland or Chaparral on north or otherwise moist slopes.
<i>Juncus acutus</i> ssp. <i>leopoldii</i> (Juncaceae) Southwestern spiny rush. Perennial herb (rhizomatous) CNPS: 4 R-E-D Code: 1-2-1 State/Fed status: CEQA? / -	Alkaline seeps, coastal salt marsh. CoDns (mesic).
<i>Lepichinia fragrans</i> (Lamiaceae) Fragrant pitcher sage. Shrub. CNPS: 4 R-E-D Code: 1-2-3 State/Fed status: CEQA? / -	Triunfo Pass. Upper Decker Cyn. Chpl.
<i>Lilium humboldtii</i> ssp. <i>ocellatum</i> (Liliaceae) Ocellated humboldt lily. Perennial herb (bulbiferous) CNPS: 4 R-E-D Code: 1-2-3 State/Fed status: - / C2	Riparian oak woodland.

**Table 3-3: Rare, Threatened and Endangered Plant Species
of the Santa Monica Mountains
(July 1994)
(Continued)**

<i>Mucronea californica</i> (Polygonaceae) California spineflower. Annual herb. CNPS: 4 R-E-D Code: 1-2-3 State/Fed status: CEQA? / -	Rare in So. Cal. Sandy flats behind Pt. Dume. CoDns, CoScr, VFGrS / sandy.
<i>Nama stenocarpum</i> (Hydrophyllaceae)* Mud nama. Annual/Perennial herb. CNPS: 2 R-E-D Code: 3-2-1 State/Fed status: CEQA / - riverbanks) (CNPS Invn). Extirpated SMM.	Rare, wet heavy soils, Santa Monica (FISMM). SwMsh (lake margins, Chpl. openings, VFGrS. Exposed soils with little cover.
<i>Pentachaeta lyonii</i> (Asteraceae) Lyon's pentachaeta. Annual herb. Assoc. <i>Chorizanthe staticoides</i> , <i>Calochortus catalinae</i> , CNPS: 1B R-E-D Code: 3-3-3 State/Fed status: CE / PE	
<i>Stipa pulchra</i> .	
<i>Polygala cornuta</i> var. <i>fishiae</i> (Polygalaceae) Fish's milkwort. Shrub (deciduous). CNPS: 4 R-E-D Code: 1-1-2 State/Fed status: CEQA? / -	Shaded slopes. Chpl. or Southern oak woodland.
<i>Senecio aphanactis</i> (Asteraceae) Rayless ragwort. Annual herb. CNPS: 2 R-E-D Code: 3-2-1 State/Fed status: CEQA / -	Rare in So. Cal., Camarillo, Newbury Park quads. CmWld, CoScr / alkaline.
<i>Suaeda esteroa</i> (Chenopodiaceae) Estuary seabligh. Perennial herb. CNPS: 4 R-E-D Code: 1-2-1 State/Fed status: CEQA? / -	Coastal salt marsh. Pt. Mugu. Hist. record for Malibu Lagoon?
<i>Thelypteris puberula</i> var. <i>sonorensis</i> (Thelypteridaceae) Sonoran maiden fern. Perennial herb (rhizomatous). CNPS: 2 R-E-D Code: 2-2-1 State/Fed status: CEQA / - streams) (CNPS Invn).	Rare, clumps along stream. Encinal Cyn. (FISMM) Medws (seeps and

**KEY TO TERMS AND ABBREVIATIONS FOR THE LIST OF THE
RARE AND ENDANGERED PLANT SPECIES OF THE SANTA MONICA MOUNTAINS**

CNPS RATING:

- 1A Presumed extinct in California
- 1B Rare & Endangered in California and elsewhere
- 2 R/E in California, more common elsewhere
- 3 Need more information
- 4 Plants of limited distribution - watch list

R-E-D CODE:

R (Rarity)

- 1 Rare but found in sufficient numbers and distributed widely enough for low extinction potential at this time
- 2 Distributed in a limited number of occurrences, occasionally more if each occurrence is small
- 3 Distributed in one to several highly restricted occurrences, or present in such small numbers that it is seldom reported

E (Endangerment)

- 1 Not endangered
- 2 Endangered in a portion of its range
- 3 Endangered throughout its range

D (Distribution)

- 1 More or less widespread outside California
- 2 Rare outside California
- 3 Endemic to California

* Extirpated in Los Angeles County

** Presumed to be extinct

HABITAT TYPES

CoDns: Coastal dunes
CBScr: Coastal bluff scrub
CoScr: Coastal scrub
Chpl: Chaparral
VFGrs: Valley and foothill grassland
VnPls: Vernal pools
Medws: Meadows and seeps
MshSw: Marshes and swamps
RpWld: Riparian woodland
RpScr: Riparian scrub

CALIFORNIA STATE LISTINGS

R Rare

T Threatened

E Endangered

C Candidate - officially proposed for listing as either R,T, or E.

FEDERAL LISTINGS

T Threatened

E Endangered

P Proposed - proposed regulation published in the Federal Register, no final rule.

C Candidate - under consideration for listing, but yet to be the subject of a final rule.

C1 - substantial data exist to support candidacy

C2 - data suggest listing is possibly appropriate but incomplete

C3 - non-candidates, but appeared on previous lists

C3A - extinct

C3B - taxonomically invalid

C3C - too widespread, currently not threatened

References:

FISMM: Flora of the Santa Monica Mountains (Raven, Thompson, and Rigge, 1986).

3.2.8.2 Significant Ecological Areas (Malibu/Santa Monica Mountains Interim Area Plan and Los Angeles County General Plan)

Los Angeles County has defined Significant Ecological Areas (SEAs) as ecologically fragile or important land and water areas which are valuable as plant or wildlife habitat. The specific criteria used to identify SEAs included the following: the habitat of rare, endangered, and threatened plant and animal species; biotic communities, vegetation associations, and habitats of plant and animal species that are either one of a kind, or are restricted on a regional basis; biotic communities, vegetation associations and habitats of plant and animal species that are either one of a kind or are restricted in distribution in Los Angeles County; habitat that at some point in the life cycle of a species, serves as a concentrated breeding, feeding, resting or migrating grounds, and is limited in availability; biotic resources that are of scientific interest because they are either an extreme in physical/geographic limitations or they represent an unusual variation in population or community; areas important as game species habitat or undisturbed examples of the natural biotic communities in Los Angeles County; special areas which do not fit any of the above criteria but may be individually noteworthy due to special characteristics (England and Nelson, 1976; Los Angeles County Significant Ecological Study, 1986).

In the MCZ there are eight designated SEAs. These SEAs include the Malibu Coastline (no acreage available), Point Dume (129 acres), a portion of Zuma Canyon (3,253 acres), a portion of Malibu Canyon including Malibu Lagoon (3,638 acres), upper La Sierra Canyon (280 acres), Hepatic Gulch (18 acres), Malibu Creek State Park Buffer (195 acres), Tuna Canyon (1,450 acres), and Cold Creek Canyon (1,505 acres). Table 3-4 summarizes the specific resource values of each of the MCZ SEAs based on the 1976 England and Nelson study, as well as on a later report prepared for the Los Angeles County Department of Regional Planning by Dr. Richard Friesen (Significant Ecological Areas of the Santa Monica Mountains Report, Los Angeles County Museum of Natural History Foundation).

Any development project proposed in an SEA within the anticipated area of the Malibu Coastal Zone must be reviewed by the County's Environmental Review Board (ERB). As a condition of project approval, this review board must make a determination that the development is highly compatible with sensitive resources found within the SEA. In the Malibu General Plan, areas classified as SEAs have been reclassified according to California Coastal Act resource protection terminology. Based on the type of biological resources identified in the SEAs within the Malibu Coastal Zone, the SEAs have been reclassified as environmentally sensitive habitat areas (ESHAs) or as significant watersheds (See Table 3-4).

3.2.8.3 Environmentally Sensitive Habitat Areas (Malibu LCP Land Use Plan)

The California Coastal Act of 1976 (Section 30107.5) defines "environmentally sensitive areas" as "... any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments." This definition applies equally to both marine and land resources. The Coastal Act further requires that these areas be identified and protected from any loss or degradation of habitat value.

The Malibu LCP Land Use Plan identified those habitats (see Figure CO-3, Environmentally Sensitive Land Resources and Figure CO-4, Environmentally Sensitive Marine and Beach Resources) in the MCZ which met the Coastal Act definition of "environmentally sensitive areas" based on the following criteria:

- Habitats that are unique, rare, restricted in distribution or extremely fragile (such as coastal dune vegetation, riparian woodlands).
- Marine areas designated as Areas of Special Biological Significance by the State Water Resources Control Board.
- Rare or endangered species habitats as defined by the State Department of Fish and Game or the U.S. Fish and Wildlife Service.
- Habitats that are recognized for their extremely high biological productivity and importance as specialized wildlife feeding, nesting or breeding grounds (such as estuaries, wetlands, kelp beds).

Those terrestrial resources which were identified in the Malibu LCP Land Use Plan to meet the criteria and legal definitions of an environmentally sensitive area, as well as those areas adjoining sensitive habitat which are functionally related to, or act as a buffer to are identified in Appendix A to this Conservation Element (Malibu Local Coastal Plan Research and Analysis and Appendices, October, 1992 by the Los Angeles County Department of Regional Planning Coastal Studies Section).

Those marine and beach resources which meet the criteria for environmentally sensitive areas are identified in Section 3.2.6.3 (Environmentally Sensitive Marine Resources) and Section 3.2.5.1 (Environmentally Sensitive Beach and Shoreline Resources).

1.1.4 Protection of Sensitive Habitat Areas

1.1.4.1 Reduced Production Standards in the Coastal Zone

Section: The Coastal Zone Act (CZMA) (16 USC 1601 et seq.) established the Coastal Zone and the Coastal Zone Management Act (CZMZA) (16 USC 1601 et seq.).

Section: The CZMA requires that coastal zone management plans (CZMPs) be developed and implemented for coastal zones. The CZMA also requires that coastal zone management plans be consistent with the National Coastal Zone Management Act (CZMZA).

Section: The CZMA requires that coastal zone management plans be consistent with the National Coastal Zone Management Act (CZMZA). The CZMA also requires that coastal zone management plans be consistent with the National Coastal Zone Management Act (CZMZA).

Section: The CZMA requires that coastal zone management plans be consistent with the National Coastal Zone Management Act (CZMZA). The CZMA also requires that coastal zone management plans be consistent with the National Coastal Zone Management Act (CZMZA).

Section: The CZMA requires that coastal zone management plans be consistent with the National Coastal Zone Management Act (CZMZA). The CZMA also requires that coastal zone management plans be consistent with the National Coastal Zone Management Act (CZMZA).

Section: The CZMA requires that coastal zone management plans be consistent with the National Coastal Zone Management Act (CZMZA). The CZMA also requires that coastal zone management plans be consistent with the National Coastal Zone Management Act (CZMZA).

1.1.4.2 Reduced Production Standards in the Coastal Zone

The CZMA requires that coastal zone management plans be consistent with the National Coastal Zone Management Act (CZMZA). The CZMA also requires that coastal zone management plans be consistent with the National Coastal Zone Management Act (CZMZA).

2015-2016
The 2015-2016 year was a successful one for the school. The students achieved high marks in the exams and the teachers were very happy to see the progress of the students. The school was very busy and the teachers were very hard working. The students were very happy and the teachers were very happy to see the progress of the students.

- 1. The school was very busy and the teachers were very hard working.
- 2. The students achieved high marks in the exams and the teachers were very happy to see the progress of the students.
- 3. The school was very busy and the teachers were very hard working.
- 4. The students achieved high marks in the exams and the teachers were very happy to see the progress of the students.

The school was very busy and the teachers were very hard working. The students achieved high marks in the exams and the teachers were very happy to see the progress of the students. The school was very busy and the teachers were very hard working. The students achieved high marks in the exams and the teachers were very happy to see the progress of the students.

The school was very busy and the teachers were very hard working. The students achieved high marks in the exams and the teachers were very happy to see the progress of the students. The school was very busy and the teachers were very hard working. The students achieved high marks in the exams and the teachers were very happy to see the progress of the students.

3.2.9 Protection of Sensitive Habitat Areas

3.2.9.1 Resource Protection Standards in the Coastal Zone

Standards: The California Coastal Act protection standards for land resources are defined in the Section 30240 as follows:

30240.(a) Environmentally sensitive habitat areas (ESHAs) shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed.

30240.(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

The protection standards for marine resources are defined in Sections 30230 and 30231 as follows:

30230. Marine resources shall be maintained, enhanced and, where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. uses of the marine environmental shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

30231. The biological productivity and the quality of coastal waters, streams, wetlands, estuaries and lakes appropriate to maintain optimum populations of marine organisms, and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of groundwater supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alternation of natural streams.

3.2.9.2 Resource Protection Areas in the Malibu Coastal Zone

The resource protection standards of the California Coastal Act recognize several important principles of biological resource conservation: (1) that the rarest and most ecologically important habitats (ESHAs) are protected from direct development (Section 30240(a); (2) that natural habitat areas adjacent to environmentally sensitive habitat areas are necessary to the health and continuance of those sensitive areas (Section 30240(b); and (3) that the health of marine resources is dependent on terrestrial land uses and in particular is related to the control of surface runoff and waste discharge and to maintaining natural stream flows with protection of riparian and wetland areas and watershed buffer areas (Section 30231).

Based on the resource protection standards of the California Coastal Act and the nature of the biological resources identified in the MCZ, the Malibu LCP Land Use Plan defined five types of resource protection areas with associated planning and development policies. The five protection areas are: (1) Environmentally Sensitive Habitat Areas (ESHAs); (2) Disturbed Sensitive Resource Areas (DSRAs); (3) Significant Watersheds; (4) Significant Oak Woodlands and Savannahs; and (5) Wildlife Habitat Linkages, or Wildlife Corridors. Additionally, USGS designated blueline streams are recognized as a critical component of the hydrological system affecting both land and marine resources and, as such, require special development standards.

The MCZ resource protection areas are defined and described below (see, also, Table 3-4). The biological resources which are included in each resource protection area are identified and their distribution and location approximately mapped in Figure CO-3 (Environmentally Sensitive Land Resources) and Figure CO-4 (Environmentally Sensitive Marine and Beach Resources). The major resource protection goal associated with each resource protection category is stated and the permitted uses and development standards required to meet each conservation goal are summarized in Table 3-5, Resource Protection Goals and Development Standards in Sensitive Resource Areas.

Environmentally Sensitive Habitat Areas (ESHAs)

Definition: ESHAs are any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed by human activities and developments.

Resource Protection Goals: Environmentally sensitive habitat areas (ESHAs) shall be protected against any significant disruption of habitat values.

Biological Resources included in the ESHA Resource Protection Category: Major riparian corridors; oak woodlands (including those in proximity to existing highways and/or residential development); coastal wetlands and estuaries; offshore rocks and rocky shoreline areas; marine resources; kelp beds; undeveloped sandy beaches; coastal bluffs and coastal sand dunes between Arroyo Sequit and Paradise Cove (Malibu LCP Land Use Plan Figures 6 and 7; Malibu LCP Research Analysis and Appendices).

Malibu Coastline SEA including the offshore area from the lower intertidal to 100 feet in depth and undisturbed sand beaches; upper Zuma Canyon SEA; Upper La Sierra Canyon SEA; Malibu Canyon and Lagoon SEA; Hepatic Gulch SEA; Point Dume SEA, including the rocky shoreline, coastal bluffs, sandy beaches and main canyon drainages; the riparian woodlands, bay laurel woodlands and live oak

**Table 3-4: Malibu Coastal Zone Significant Ecological Areas:
Categorization by Coastal Act Sensitive Habitat Criteria**

The Malibu Coastal Zone SEAs, described below, are classified by the Coastal Act criteria of environmentally sensitive area according to either rarity or ecological importance.

Significant Ecological Area	Category
MALIBU COASTLINE Coastal Bluffs, Coastal Strand, Rocky coastline, canyon corridors with Walnut Woodlands, Intertidal	ESHA
UPPER ZUMA CANYON Undisturbed habitat for many R&E species	ESHA
UPPER LA SIERRA CANYON Woodlands; R&E species	ESHA
MALIBU CANYON AND LAGOON Rare and Endangered species; ecologically important wetlands	ESHA
HEPATIC GULCH Unique community	ESHA
COLD CREEK	Special Resource Management Area
POINT DUME Coastal bluffs, sandy, beaches, rocky points, coastal canyons, offshore marine habitat	ESHA
PENALTUNA CANYONS Riparian woodlands, Bay laurel woodlands, Oak woodlands Undisturbed watershed vegetation	ESHA Significant Watershed

**Table 3-5: Resource Protection Goals and Development Standards
in Sensitive Resource Areas**

Resource Protection Category	Habitat Type	Resource Protection Goal	Habitat Protection Policies
RPA	ESHA, DSRA, Significant Watersheds, Wildlife Habitat Linkage		Conservation Element Policies 1.1.1, 1.1.3, 1.1.5, 1.1.8, 1.1.9, 1.2.5, 1.2.6 and 1.2.8 and Implementation Measures 1, 3, 4, 9, 11, 12, 13, 14, 15, 16, 17, 18, 25, 27, 40, 41, 54. Land Use Element Policies 1.2.2, 1.4.1, 1.4.3, 1.4.4, 1.4.5, 1.5.1, 1.5.2, 7.2.1 and Implementation Measures 10, 24, 25, 26, 27, 30, 31, 32, 33, 34, 55, 59, 92, 93, 94 Open Space Element Policies 1.1.1, 1.1.3, 1.2.1, 1.2.2, 1.2.3, 1.3.1, 2.3.7 and Implementation Measures 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 26, 32, 39
ESHA		Environmentally sensitive habitat areas (ESHAs) shall be protected against any significant disruption of habitat values	Conservation Element Policies 1.2.1, 1.1.4, 1.2.2, 1.2.3, 1.2.4, 1.2.9, 1.3.4, 1.3.6, 1.3.1 and Implementation Policies 2, 6, 10, 23, 26, 40, 41, 59, 61, 66 Land Use Element Policies 1.2.1, 4.3.4 and Implementation Measures 11, 12, 13, 14, 15, 78

Resource Protection Category	Habitat Type	Resource Protection Goal	Habitat Protection Policies
MARINE	-Intertidal/Subtidal -Kelp Beds -Near shore shallow water fish habitat -Clam habitat -Rocky shoreline -Sea lion haulouts -Shore fishing area		Conservation Element Policies 1.3.1, 1.3.3, 1.3.5, 1.3.10, 1.3.12, 1.3.13 and Implementation Measures 32, 37, 38, 42, 44, 45, 49, 50, 51, 52, 53, 55, 56, 57, 62, 64, 68.
BEACH/ UPLAND	-Marsh/Wetland -Dunes -Coastal bluffs -Undeveloped sandy beaches		Conservation Element Policies 1.3.2, 1.3.5, 1.3.7, 1.3.8, 1.3.9, 1.3.10 and Implementation Measures 28, 29, 30, 31, 33, 39, 46, 47, 48, 57, 58, 63, 65, 67, 68 Open Space Element Implementation Measures 28
INLAND	-Riparian stream corridors -Oak woodlands -Designated woodlands and watershed areas: - Upper Zuma Canyon, La Sierra Canyon, Malibu Canyon, Hepatic Gulch, Pt. Dume canyon drainages, Tuna/Pena Canyon woodlands -CDFG designated plant communities of limited distribution and very threatened status: - Southern Coastal Bluff Scrub, Southern Foredunes, Southern Dune Scrub, Coastal and Valley Freshwater Marsh, Coastal Brackish Marsh	Oak woodlands shall be considered an environmentally sensitive habitat area which shall be protected against any significant disruption of habitat	
DSRA	-Developed riparian stream corridors: - Coastal canyons, Pt. Dume - Coastal bluffs adjacent to development - Coastal wetlands: Zuma, Topanga, Trancas, Arroyo Sequit	To prevent further degradation of remaining biological resources and to restore disrupted habitat values where feasible and ecologically desirable.	

Resource Protection Category	Habitat Type	Resource Protection Goal	Habitat Protection Policies
SIGNIFICANT WATERSHED	-Calif. Dept. of Fish & Game designated plant communities of threatened or very threatened distribution: -Valley Needlegrass -Venturan Coastal Sage Scrub -Ceanothus megacarpus Chaparral -Ceanothus crassifolius (Hoary leaf) Chaparral -Redshank Chaparral -California Walnut Woodland -Valley Oak Woodland	To protect the habitat of the sensitive marine and terrestrial habitat areas within the watershed or offshore from the watershed by minimizing vegetation removal, sedimentation and increased surface erosion. To protect those plant communities of wide distribution in the MCZ, but nonetheless ranked as very threatened by the Calif. Dept. of Fish & Game. To minimize habitat fragmentation with subsequent loss of biological diversity.	Conservation Element Policies 1.1.2, 1.1.8, 1.2.2, 1.2.3
WILDLIFE HABITAT LINKAGES	Various	To provide sufficient habitat for wide-ranging animal species with large home territories as well as for other wildlife species. To protect the biological diversity of the SMMNRA by providing sufficient habitat area to ensure the long-term survival of species by protecting populations from random or periodic catastrophic extinction processes. To protect those plant communities of wide-spread distribution in the MCZ, but nonetheless ranked as very threatened by the Calif. Dept. of Fish & Game. To minimize habitat fragmentation with subsequent loss of biological diversity. To provide a protected wildlife area extending the length of the Santa Monica Mountains coastal zone.	Conservation Element Policies 1.1.2, 1.1.8, 1.2.1, 1.2.2, 1.2.3

Resource Protection Category	Habitat Type	Resource Protection Goal	Habitat Protection Policies
BLUELINE STREAMS	Various	Protect the natural hydrological patterns of the coastal canyons and the plant communities associated with the drainage pathways.	Land Use Element Implementation Measure 29

woodlands of the Tuna/Pena Canyons SEA (Los Angeles County's SEA Study, 1976 and the Significant Ecological Areas of the Santa Monica Mountains Report by Dr. R. Friesen for the Los Angeles County Department of Regional Planning and Table 3-4 of this Conservation Element). Plant communities of limited distribution and ranked as very threatened by the State of California's Department of Fish and Game, including: Southern Coastal Bluff Scrub; Southern Foredunes; Southern Dune Scrub; Coastal Brackish Marsh; Coastal and Valley Freshwater Marsh; Valley Needlegrass Grassland; Southern Willow Scrub; and California Walnut Woodland (see previous Tables 3-1 and 3-4).

Disturbed Sensitive Resource Areas (DSRAs)

Definition: DSRAs are those areas which would historically have met the Coastal Act definition of an environmentally sensitive habitat. However, coastal development has resulted in substantial modification of the resources in these areas. Although DSRAs no longer have the same biological significance or sensitivity as an undisturbed ESHA, they are sufficiently valuable to warrant resource protection.

Resource Protection Goals: To prevent further degradation of remaining biological resources and to restore disrupted habitat values where feasible and ecologically desirable.

Biological Resources Included in the DSRA Resource Protection Category: In general, developed riparian corridors in coastal canyons and development in Significant Oak Woodlands (see Figure 6 of the Malibu LCP Land Use Plan and Figure CO-3 of this Conservation Element). Examples include developed portions of Escondido, Ramirez and Las Flores Canyons, and coastal bluffs and canyons on Point Dume.

Significant Watersheds

Definition: Significant Watersheds in the MCZ are designated in accordance with Section 30240 of the Coastal Act. Significant Watersheds are considered necessary to ensure protection of sensitive resource areas and associated species, particularly wildlife. Significant Watersheds are not considered to be as environmentally sensitive as ESHAs, because they are dominated by vegetation and wildlife which are common throughout the Santa Monica Mountains. Although these watersheds are dominated by common species, they provide habitat for various declining, restricted, rare or endangered species and plant communities. The common vegetation type of the MCZ, Venturan Coastal Scrub, is placed by the State of California in its most threatened category in the Department of Fish and Game's inventory of California's terrestrial plant communities. Significant watershed are those watershed with significant drainage areas (greater than 1 sq. mile; see Table VIII.1 of the Malibu Wastewater Management Study, 1992) which

develop significant riparian vegetation, or drain into an area of sensitive marine resources which would be susceptible to damage from terrestrial impacts related to erosion and runoff.

Resource Protection Goals: To protect the habitat values of the sensitive marine and terrestrial habitat areas within the watershed or offshore from the watershed by minimizing vegetation removal, erosion, sedimentation, and increased surface erosion. To protect those plant communities of widespread distribution in the MCZ, but nonetheless ranked as very threatened by the California Department of Fish and Game. To minimize habitat fragmentation with subsequent loss of biological diversity.

Watersheds Included in the Significant Watershed Resource Protection Category: Include but are not limited to Arroyo Sequit, Zuma Canyon, Solstice Canyon, Corral Canyon, Ramirez Canyon, Las Flores Canyon, Encinal Canyon, San Nicholas Canyon, Los Alisos (Decker) Canyon, Lechuza Canyon, Escondido Canyon, Latigo Canyon, Puerco Canyon, Carbon Canyon, Topanga Canyon and its tributaries, Malibu Canyon, Tuna Canyon, and Trancas Canyon.

Significant Oak Woodlands and Savannahs

Definition: These resources are located outside the riparian corridor of significant watersheds, and may be found in areas close to existing roads and development. Even in a relatively disturbed condition, oak woodland and oak savannah habitats are considered a biologically critical resource because of the large number of wildlife species which depend upon the resources provided by oak trees. These areas are also considered to be an important biological resource because of the declining nature of oak-dominated habitats in southern California.

Resource Protection Goals: Oak woodlands shall be considered an environmentally sensitive habitat areas which shall be protected against any significant disruption of habitat values.

Oak Woodlands Included in the Significant Oak Woodland and Savannahs Resource Protection Category: Those areas identified on Figure 6 of the Malibu LCP Land Use Plan and Figure CO-3 of this Conservation Element, and any area which meets the plant community descriptions of Coast Live Oak Woodland and Valley Oak Woodland of the California Department of Fish and Game Terrestrial Natural Communities inventory. Significant oak woodlands are found in scattered locations within the MCZ, including Ascended Canyon and along Topanga Canyon and its tributaries.

Wildlife Habitat Linkages

Definition: Areas of relatively undisturbed open space, which by virtue of their geographic location and habitat characteristics, facilitate movement and provide life cycle requirements of plant and animal species between major habitat areas. These habitat areas provide connections between significant watershed canyons and the core habitat reserves of the SMMNRA park lands. Core habitat reserves include Topanga State Park, Malibu Creek State Park, Zuma/Trancas Canyons, Leo Carrillo State Beach and Point Mugu State Park.

Resource Protection Goals: To provide sufficient habitat for wide-ranging animal species with large home territories as well as for other wildlife species. To protect the biological diversity of the SMMNRA by providing sufficient habitat area to ensure the long-term survival of species by protecting populations from random or periodic, catastrophic extinction processes. To protect those plant communities of widespread distribution in the MCZ, but nonetheless ranked as very threatened by the California Department of Fish and Game. To minimize habitat fragmentation with subsequent loss of biological diversity. To provide a protected wildlife area extending nearly the entire length of the Santa Monica Mountains coastal zone.

Wildlife Habitat Linkage Areas Included in the Wildlife Habitat Linage Resource Protection Category: Those areas identified in Figure 6 of the Malibu LCP Land Use Plan and Figure CO-3 of this Conservation Element, including the habitat areas between Topanga State Park, Malibu Creek State Park, Zuma/Trancas Canyons, Leo Carrillo State Beach and Point Mugu State Parks.

Blueline Streams

Definition: Those major drainage pathways identified by a blue line on USGS topographic maps.

Resource Protection Goal: Protect the natural hydrological patterns of the coastal canyons and protect the plant communities associated with the drainage pathways.

Streams Included in the Blueline Stream Resource Protection Category: Those drainage channels identified by a blueline on the following USGS quadrangle maps: Triunfo; Point Dume; Malibu Beach; Topanga; and other quadrangles that encompass inland areas adjacent to the City of Malibu that have blueline streams that are tributaries to blueline streams within the City of Malibu.

3.2.10 Scenic Resources

Scenic resources are natural features of the landscape which exhibit a high scenic value. These resources include landforms, vegetation, and water forms which are relatively distinct from the general landscape found throughout the coastal zone. They provide visual enhancement and pleasure and are worthy of preservation for aesthetic, historical, topographical, cultural, or biological reasons.

The City of Malibu is located in the Malibu Coastal Zone (MCZ) and is thereby subject to Coastal Act provisions relating to scenic and visual resources. The Coastal Act provisions state that such resources are to be protected and that new development must be sited in such a manner as to preserve these resources. A primary concern under Section 30251 of the Coastal Act is the protection of views from public areas rather than from private residences. An inventory of Malibu's visual resources was conducted and analyzed in the 1982 Local Coastal Program for the Malibu area. Visual resources analyzed were from public areas such as highways, public beaches, vista points, and parks.

3.2.10.1 Vistas

There are approximately 22 "scenic resources" in the City and surrounding areas identified in the Malibu Local Coastal Program (see Figure CO-5). Scenic resources which are not located within the City limits have been included in this inventory because of their proximity to and access from the City. Many of these resources, located outside of the City, are either visible from within the City or provide views of areas within the City.

West Mulholland Highway Sandstone: A cluster of rugged sandstone peaks, visible from Mulholland Highway and Encinal Canyon Road.

Saddle Rock: A prominent sandstone landform, visible from Mulholland Highway and Encinal Canyon, Kanan-Dume, and Latigo Canyon Roads.

Turtle Rock: A prominent sandstone landform, visible from Mulholland Highway and Encinal Canyon, Kanan-Dume, and Latigo Canyon Roads.

Lower Zuma Canyon: A topographically diverse and relatively pristine area with steep slopes and rugged ridgelines. The area is visible from Pacific Coast Highway.

Little Dume Cove Bluffs: Rocky shores, outlying reefs and kelp beds, sandy pocket beaches, and numerous small caves are among the scenic features of this area. The precipitous bluffs, which rise up to 200 feet, are visible from many points along Pacific Coast Highway.

Cornell Sandstone Peaks: Rugged sandstone peaks, visible from Kanan-Dume Road.

Brent's Mountain: A prominent landform, partially within Malibu Creek State Park, with sheer rock sides and an elevation differential of more than 1000 feet.

Clareville Hills: Scenic rolling hills with clusters of live oak trees. The area is visible from Mulholland Highway and Las Virgenes Road.

Washburn Canyon: A large, deep, and wide valley with steep, rocky walls. The canyon is filled with dense, green vegetation, including tall trees and shrubs. The river flows through the center of the canyon, surrounded by a thick layer of rocks and debris. The canyon is named after the Washburn family, who lived here for many years.

Red Canyon: A deep, narrow canyon with steep, red rock walls. The canyon is filled with dense, green vegetation, including tall trees and shrubs. The river flows through the center of the canyon, surrounded by a thick layer of rocks and debris. The canyon is named after the Red family, who lived here for many years.

Blue Canyon: A deep, narrow canyon with steep, blue rock walls. The canyon is filled with dense, green vegetation, including tall trees and shrubs. The river flows through the center of the canyon, surrounded by a thick layer of rocks and debris. The canyon is named after the Blue family, who lived here for many years.

**Insert
Figure CO-5**

Yellow Canyon: A deep, narrow canyon with steep, yellow rock walls. The canyon is filled with dense, green vegetation, including tall trees and shrubs. The river flows through the center of the canyon, surrounded by a thick layer of rocks and debris. The canyon is named after the Yellow family, who lived here for many years.

Green Canyon: A deep, narrow canyon with steep, green rock walls. The canyon is filled with dense, green vegetation, including tall trees and shrubs. The river flows through the center of the canyon, surrounded by a thick layer of rocks and debris. The canyon is named after the Green family, who lived here for many years.

Orange Canyon: A deep, narrow canyon with steep, orange rock walls. The canyon is filled with dense, green vegetation, including tall trees and shrubs. The river flows through the center of the canyon, surrounded by a thick layer of rocks and debris. The canyon is named after the Orange family, who lived here for many years.

Red Canyon: A deep, narrow canyon with steep, red rock walls. The canyon is filled with dense, green vegetation, including tall trees and shrubs. The river flows through the center of the canyon, surrounded by a thick layer of rocks and debris. The canyon is named after the Red family, who lived here for many years.

Blue Canyon: A deep, narrow canyon with steep, blue rock walls. The canyon is filled with dense, green vegetation, including tall trees and shrubs. The river flows through the center of the canyon, surrounded by a thick layer of rocks and debris. The canyon is named after the Blue family, who lived here for many years.

Yellow Canyon: A deep, narrow canyon with steep, yellow rock walls. The canyon is filled with dense, green vegetation, including tall trees and shrubs. The river flows through the center of the canyon, surrounded by a thick layer of rocks and debris. The canyon is named after the Yellow family, who lived here for many years.

Green Canyon: A deep, narrow canyon with steep, green rock walls. The canyon is filled with dense, green vegetation, including tall trees and shrubs. The river flows through the center of the canyon, surrounded by a thick layer of rocks and debris. The canyon is named after the Green family, who lived here for many years.

Orange Canyon: A deep, narrow canyon with steep, orange rock walls. The canyon is filled with dense, green vegetation, including tall trees and shrubs. The river flows through the center of the canyon, surrounded by a thick layer of rocks and debris. The canyon is named after the Orange family, who lived here for many years.

Malibu Canyon: A deeply incised gorge featuring massive rock outcroppings, a "hogback" ridge, and exposed strata on canyon walls which have elevation differentials of more than 1000 feet. Malibu Creek, which flows through the canyon, is lined with lush riparian vegetation, and is the major water gap in the region. The canyon is accessed by Malibu Canyon Road.

Dark Canyon: Vertical dipping strata on a mountain crest with extreme slopes. The area is visible from Piuma Road.

Piuma Road Crest: Sandstone rock outcroppings along the mountain crest, traversed by Piuma Road.

Upper Carbon Canyon Cliffs: A cliff face of massive red sandstone, accessed by Piuma Road.

Schueren Road Sandstone: A bench-like sandstone outcropping.

Topanga Lookout Ridge: Massive sandstone cliffs and "hogback" ridge. The area is visible from Stunt, Schueren, and Saddleback Peak Roads.

Old Topanga Sandstone: A massive sandstone outcropping. Old Topanga Canyon Road provides access to the area.

Old Topanga Watergap: Large exposed aggregate sedimentary strata with a unique pitted appearance due to weathering. Old Topanga Canyon Road provides access to the area.

Fernwood Hillside: Dense brush and tree covered hillside with small rock outcroppings. Topanga Canyon Boulevard and Tuna Canyon Road provide access to the area.

Lower Topanga Canyon: A narrow, rugged canyon with exposed canyon walls which exhibit contoured rock strata. The ridges are heavily vegetated, and riparian vegetation lines the canyon bottom. Intermittent waterfalls exist. The canyon is accessed by Topanga Canyon Boulevard.

Upper Zuma Canyon: This rugged and relatively pristine canyon is the focus of a public viewing area along Kanan Dume Road. Steep slopes are covered with highly textured chaparral. The ocean is a background feature, framed by the V-shaped canyon mouth.

Newton Canyon Hillside: The slopes on the south side of Newton Canyon Road are covered with a richly-textured, dense stand of oaks. These slopes are highly visible from Latigo Canyon Road and feature both middleground and foreground, depending upon the viewer's location. One or two residences have been developed along the canyon bottom; associated grading is visible from Latigo Canyon Road. Measures should be taken to soften this graded area either by using agricultural or natural vegetation.

Lower Latigo Canyon: Lush riparian vegetation exhibiting a diversity of color and texture lines the canyon bottom. The area is accessed by Latigo Canyon Road.

Tuna Canyon: In both of these areas along Tuna Canyon Road, lush riparian woodland forms a visually pleasing canopy over the road.

There are numerous vista points in the Malibu area. Vista Points are areas that provide highly scenic and panoramic views of several miles with little or no sense of boundary restriction. Such views are typically available from a high vantage point. There are five areas in and adjacent to Malibu that display characteristics which make them suitable as vista points. These vista points are as follows:

Little Sycamore Canyon Vista Point: The view from the approximate midpoint encompasses almost the entire West Mulholland Viewshed and the ocean beyond. Visual components include the jagged, rocky peaks and ridgeline on the northwest side of the viewshed. The southeast portion of the viewshed displays rolling hills covered with a dark green mantle of chaparral. These components, in conjunction with the distant blue of the ocean, create a vista rich in color, form and texture.

Trancas Vista Point: An existing unpaved public viewing area located on the seaward shoulder of Pacific Coast Highway, just above Trancas Beach, offers a significant panoramic view. To the west, Lechuza Point is visible along with the coastline and its architecturally distinct seaside homes. The view to the east encompasses the length of Zuma and Point Dume Beaches, a broad sandy strip ending with the high relief of the Point Dume promontory. The white water of waves, the expanse of blue ocean to the horizon, and the distinct coastal configuration all contribute to a highly scenic vista.

Point Dume Vista Point: The tip of Point Dume offers a 360 degree panorama of ocean, bluffs, mountains, and canyons.

Kellers Shelter Vista Point: An undeveloped blufftop situated directly above the Pacific Coast Highway near Malibu Lagoon State Beach, offers significant views of Malibu Point and Kellers Shelter. Components of this view includes the Malibu Pier, the white water waves breaking along the point, and the half moon-shaped bay.

Saddle Peak-Schueren Vista Point: The area where Saddle Peak and Schueren Roads intersect provides views to the north and south. The northern view stretches for many miles, and encompasses the San Fernando Valley. Isolated peaks and background ridgelines exhibit reddish-brown hues. The view to the south looks down on steep slopes exhibiting a dark green mantle of chaparral. The irregular topography includes many rock outcroppings.

Charmlee Park: The park has a number of vista points that give expansive views of the Pacific Ocean, the Channel Islands and of the undeveloped coastal slopes and western Malibu.

3.2.10.2 Ridgelines

Significant ridgelines also constitute a scenic resource of the coastal zone due to their high visibility from many vantage points. Ridgelines are typically defined as the line separating drainage basins. Significant ridgelines are those whose ridges silhouette the sky or the ocean, and are clearly visible from scenic roads. These ridgelines are located throughout Malibu and the Santa Monica Mountains.

3.2.10.3 Scenic Highways

A primary component of many outdoor recreation activities is movement or travel. One of the most popular forms of outdoor recreation in southern California is driving for pleasure. The travel to and from recreational areas is considered a major part of the landscape system, both as a connecting element and as a landscape in its own right. A scenic highway presents opportunities for visual stimulation from automobiles or tour buses. In the Malibu area, views from the roads are characterized by panoramic vistas of both steep canyon slopes covered with native vegetation and the Pacific Ocean. Although development along the coast has significantly reduced views of the ocean in some areas of Malibu, there is an opportunity for public investment to ensure the preservation of many existing views. Many roads in Malibu are considered scenic, but only the Pacific Coast Highway has been officially designated as an eligible scenic highway by the California Department of Transportation. Official designation of scenic highways is conducted by the State Scenic Highway Advisory Committee. There are no specific regulations that define the visual characteristics which qualify a road as a scenic highway, but the following considerations are often utilized:

- **Visibility** - The driver should be able to experience scenery without having to stop or significantly change the necessary angle and duration of vision required for safe driving.
- **Landforms** - This parameter includes the physical characteristics of the natural corridor, such as gently rolling hills or rugged cliffs, streams, geologic formations, and distant ridges.
- **Vegetation** - This parameter includes the type of vegetation within view, such as row crops, orchards, chaparral or woodlands.

- Structures - Buildings may be included in scenic corridors and may add to scenic quality.
- Panoramas - Scenic overlooks with panoramic views of urban, rural , or natural areas should be included when available.

3.2.10.4 Viewsheds

Viewsheds providing views of the ocean and surrounding areas generally follow watershed patterns and are displayed in Figure CO-5. They are separated from each other by major ridgelines. Several viewsheds have high point evaluations. Although these viewsheds are visually distinct from one another, they are similar in that their visual components are highly scenic. These viewsheds exhibit those characteristics of importance in the coastal zone- undisturbed natural settings offering scenic viewing opportunities.

3.2.11 Cultural Resources

3.2.11.1 Historic Sites

Malibu history dates back to the Chumash Indians and the village of Humaliwo at the mouth of Malibu Creek. Point Dume was named by the English Explorer George Vancouver in 1794. Between 1800 and 1892 there were four European owners of the area that is now Malibu. In 1800, Jose Bartolome Tapia acquired a "use" concession from Spain for the 13,000 acre Rancho Topanga Malibu Sequit. This concession stretched from Point Mugu to Pacific Palisades. In 1848, Leon Victor Prudhomme, the husband of Jose Tapia's granddaughter, purchased Rancho Malibu for 400 pesos. Nine years later, in 1857, Matthew Keller bought the Rancho for \$1,400. The last owners were Frederick and May K. Rindge. It is the legacy of the Rindge Family's determination to restrict development which is responsible for the vast amount of open space found in the Malibu area today. A more detailed history of Malibu is provided in the Background Report for the Land Use Element.

There are over 250 officially recognized historic sites in Los Angeles County, four of which are located in Malibu:

Adamson House: This site is located at the Malibu Lagoon State Park. It was once the home of Rhoda Rindge Adamson, daughter of Frederick and May K. Rindge. It is the best surviving work and only intact example of architecture from Stiles O. Clements and represents the Moorish-Spanish Colonial Revival Style popular in the late 1920s. The site is listed in the National Register of Historic Places and as a California Historical Landmark.

Serra House: This site is located on Landumus Hill near the mouth of Malibu Creek. It is a site of local historic interest as it was once known as the unfinished Rindge Mansion. The site was purchased in 1942 by the Franciscan Order.

Malibu Pier: This site is located east of Malibu Lagoon State Park in the commercial core of the City. The site is a registered Los Angeles County Landmark and a California Point of Historical Interest.

Historic village of Humaliwo: National register site.

3.2.11.2 · Archaeological Resources

Present knowledge of the earliest occupations in Malibu is very limited due in part to the small size of early groups and the reduced probability of charcoal, bones, and shells being preserved in earlier sites. Additionally, earlier coastal sites may have been flooded by rising sea level caused by melting of glaciers and there was typically poor preservation of stratigraphic features (King, 1993). The following discussion on the Chumash is based primarily on the paper, *Malibu General Plan: Native Societies of Malibu* by Chester King, Ph.D. which is contained as an appendix to this section.

The Santa Monica Mountains were home to Native American Indian people who developed complex social and economic systems.

The Malibu area was historically occupied by Chumash. The territory inhabited by the Chumash included San Luis Obispo, Santa Barbara, the majority of Ventura, southwestern Kern, and northwestern Los Angeles Counties. The name Chumash has been accepted as an ethnic designation by anthropologists and descendants of people baptized at the Spanish missions in Chumash territory. Chumash cultural sites are important for providing an identity for the City of Malibu. The name Malibu is derived from Humaliwu, the Chumash village which served as a capital for the Santa Monica Mountains area (King, 1993).

Chumash society evolved during the last 9,000 years. The evolution of Chumash society is reflected in changes in artifact forms and diversity, changes in plant and animal food refuse, changes in the organization of cemeteries, and shifts in settlement patterns. The Chumash were considered to be the most advanced native society in California because of their emphasis on manufacturing and trade, their development of maritime fishing, and their complex bead money system (King, 1993).

In Malibu, the prehistoric period represents over 9,000 years and ended with the beginning of the Spanish colonization of California in 1769 and the beginning of maintenance of archives of historical documents. The first historic period was the mission period which ended in approximately 1834 due to the secularization of the missions (King, 1993).

There are approximately 120 archaeological sites, in the City of Malibu. Sites in the Santa Monica Mountains include village sites, burial grounds, camps or food processing areas, quarries and rock art sites. Many sites have already been destroyed or disturbed. Currently, only a small percentage of the area has been surveyed, indicating that additional archaeologically significant sites may exist in the Malibu area.

The east west trend of the Malibu area resulted in the formation of many places well suited to boat launching and up-welling which provided a rich marine environment. These conditions contributed to a high density of population along the coast. Within the boundaries of the City four villages have been identified which were occupied during the period of recruitment to Spanish missions between 1785 and 1810. These villages were (east to west) Lisiqshi, Sumo, Lojostogni, and Humaliwo.

The village of **Lisiqshi** was located at the beach near the mouth of Arroyo Sequit and is currently traversed by Highway 1. The village was inhabited by people recruited by the Ventura Mission.

The village of **Sumo** is the second largest Chumash site to have been identified in Los Angeles County. It is believed to have occupied the Point Dume and Paradise Cove area, possibly including all of the marine terraces between Little Sycamore and Malibu Canyons. People from the Sumo village were baptized at the San Fernando and Ventura missions (King, 1993).

Possibly, the most well-documented and intensively investigated site in Los Angeles County is the **Humaliwu** site. The site contains three separate areas of archaeological or historical significance, including a prehistoric Indian site, a historic Indian site and an old frame house which was built by original white settlers in the Malibu area (it is now used as a museum). Much of the Humaliwu site is preserved. A second site, currently located under Highway 1 to the east was also apparently part of the historic village (King, 1993). The site is listed on the National Register of historic places.

In Malibu, cemetery and residential contexts have been excavated which are approximately 7,500 years old. Artifacts and food remains recovered from sites in the Santa Monica Mountains and the Santa Barbara Channel area indicated that people living along the coast were fishing with bone hooks, using boats or rafts to trade with the Channel Islands, and were taking sea mammals and large fish. Early mainland residential sites frequently contain large numbers of milling stones for processing small seeds. Hunting was also of importance (King, 1993).

Early settlements were small hamlets, defensively situated on elevated land forms. Over time, the tendency was to settle in less defensive and locate in more central locations to facilitate social and economic integration. Shortly after 1542, many small hamlets were abandoned and some large towns and villages were formed. The population distribution changes can be attributed to growth in importance of trade centers (King, 1993).

In addition to permanent settlement sites, other sites in Malibu were occupied during particular seasons while people were conducting activities away from their villages. These camp sites include sites occupied while gathering and hunting (King, 1993).

Ethnographic information indicates that Point Dume was an important suns shrine to many native cultures throughout southern California. Ethnographic literature indicates that the priests of the Point Dume shrine were respected for their powers which were believed to include the ability to cause rain and to resurrect dead people (King, 1993).

Due to the culturally sensitive nature of the archaeological resources in the area, the location and extent of other recorded sites will not be disclosed in this document. Specific sites may be identified as subsequent environmental documentation is prepared for the City or to determine the impact of individual projects.

3.2.11.3 Paleontological Sites

Los Angeles County is one of the richest areas in the world for both fossil marine vertebrates and land vertebrates from sediments deposited over the last 25 million years. Many fossilized remains are found in sedimentary rocks of the Santa Monica Mountains that have been tilted and uplifted. There are three significant paleontological resources in the Santa Monica Mountains in the vicinity of the Malibu area. Only one of these sites is located in close proximity to the City boundary. The three sites, their location and the significant paleontological resources which have been recorded there are described briefly below:

- West of Topanga Canyon Road and south of the Los Angeles City line - material from the late Miocene era in the Modelo Formation.
- Old Topanga Road, south of Calabasas - several marine birds were found in the Modelo Formation Upper Member.
- Southwest of the Ventura Freeway and east of Westlake Boulevard - vertebrates from the recent Pleistocene epoch.

The invertebrate fossils which are found in the area are from the Miocene period. Some of the larger sites containing these fossils include Old Topanga Canyon Road near Calabasas Peak and Dry Canyon.

3.3 Constraints

Constraints which effect environmental resource management include ecological, governmental, and economic factors. The area's finite resources and their

interrelationship with other aspects of the regional ecosystem determine their suitability for management and use. City regulations may have unforeseen side effects on the preservation and prudent use of these resources. Economic constraints and pressures are often felt by private land owners in planning the use or development of their land. These economic constraints are also experienced by public agencies when they attempt to preserve open space and develop parks and recreation facilities. These constraints and others that may affect environmental resource management in Malibu are discussed in greater detail below.

3.3.1 Physical Changes in the Environment

Development associated with human settlement results in physical changes to the environment. These changes typically involve reduced availability or quality of soil and water resources that are important for human use and the needs of other biological resources. These changes also often result in a reduction of habitat value and function for many species of plants and wildlife. This reduction in value and function is generally associated with a reduction in the areal distribution of vegetation communities and other natural features which provide essential habitat, but can also involve unnatural competition and predation from introduced, non-native species of plants and wildlife; disruption of the normal fire cycle of local vegetation; reduced recruitment of young native oaks; fragmentation of existing habitat; noise; unnatural lighting; creation of barriers to dispersal or migration; and the introduction of environmental contaminants which affect species viability.

Development can also affect the way we perceive our environment. Changes to scenic resources or visual viewsheds are often associated with a negative change in the environment. Many people experience a "crowding" effect when areas that were previously open space are developed. This effect increases in direct proportion to the magnitude of the physical change in the area or viewshed.

3.3.2 Lack of Comprehensive Resource Surveys

A significant obstacle to the preservation of many of the Malibu area's natural resources is the lack of comprehensive surveys to identify areas supporting sensitive resources. The coastal areas of the MCZ are relatively well-described, but many portions of the upper watersheds have not received as much attention.

The City of Malibu and the MCZ are largely undeveloped and have not been surveyed extensively for the presence of archaeological, paleontological, and historic resources. These resources have received some attention from academic institutions, but most recorded resources are associated with studies conducted to comply with CEQA. These studies are rarely comprehensive.

Biological studies which identify important migration and travel corridors also appear to be lacking. A focus on sensitive vegetation communities and drainages does nothing to ensure that individual watersheds do not become biologically isolated. Many areas of habitat, not considered to be sensitive, are contiguous with more sensitive resources and provide the continuity required to avoid biological and genetic isolation of populations. Preservations of defined areas of suitable habitat is not always sufficient to ensure that populations will not become locally extirpated. This approach is especially true of species which require large areas of habitat or which occur in very dispersed populations.

Continuing development pressure provides mechanisms (i.e. CEQA and NEPA processes) by which investigation of these resources can occur, but this approach typically results in a piecemeal approach to preservation of resources. Regional planning for the continued

viability of natural resources is much more effective, but often requires inter-jurisdictional agreements between jurisdictions which do not always agree on the implementation necessary to maintain the resources. Regional planning is also more costly and the costs are often not born by development interests.

3.3.3 Maintenance of High Quality Water Resources

Water is a fundamental requirement of all living things. Water is especially important to humans due to our water-intensive lifestyle. We use water for domestic consumption, to reshape our environment (i.e. lawns and ornamental plantings), industrially, and to dispose of domestic wastes. These uses however have the potential to affect the availability and quality of water resources, not only for human uses, but for use by other biological resources.

Much of Malibu has been developed using individual septic systems for each residence rather than a public sewer system. This strategy has been strongly supported in the community as a means to reduce the rate and intensity of growth. Because many areas within the MCZ have shallow soils, soils that are impermeable or slowly permeable, perched water tables, and are subject to flooding; there is some potential to negatively affect both ground and surface water quality from continued development and use of on-site septic systems, if such systems are not properly designed and maintained. In recent years, residents have actively worked to ensure that septic systems are properly designed and maintained. As long as a high level of supervision of design and maintenance of these systems is maintained, septic systems are not expected to significantly impact the quality of the groundwater resource (Warshall & Williams, 1992).

Another important non-point source of contamination is the Malibu stormwater drainage conveyance system. This source of contamination provides some aseasonal flows to drainages, but more importantly conveys a variety of urban contaminants which affect biological resources in the drainages, Malibu Lagoon, and Santa Monica Bay. Each of these resources would benefit from a stormwater drainage management plan which establishes seasonal water quality standards for these receiving waters. These resources would also benefit from restoration of freshwater wetlands which can provide some level of biological treatment of contaminants as well as development of other measures which trap potential urban pollutants.

Lastly, urban runoff from communities located to the north of Malibu, such as Calabasas, Agoura Hills, and Westlake, also provide a non-point source of contamination. This source of runoff is also typically aseasonal and contains various urban pollutants which affect aquatic and marine resources within the MCZ. To address this issue, Malibu should strive to develop inter-agency management agreements which establish water quality standards for the various receiving waters.

Point sources of pollution affecting the MCZ have been almost non-existent with the exception of the Tapia Water Reclamation Facility (TWRF). The TWRF has been a significant source of aseasonal water flows and nutrient loading in Malibu Creek and especially Malibu Lagoon. This source of contamination has had major impacts on the

Malibu Creek/Malibu Lagoon system and will continue to reduce the quality of the resources provided by this drainage if seasonal water quality standards for these receiving waters are not established.

3.3.4 Recreational Uses

Malibu's location between the Pacific Ocean and the Santa Monica Mountains provides residents and visitors with a diversity and abundance of recreational opportunities. These opportunities were officially recognized when the U.S. Congress established the Santa Monica Mountains National Recreation Area in 1978. The canyons, hillsides, beaches, and rocky coast support a variety of natural vegetation communities and their associated flora and fauna. Many of these resources are located within County, State, and Federal parklands or are accessible by local trails. While these resources present a tremendous opportunity for recreational pursuits, intensive and irresponsible recreational uses of these lands can result in degradation of the resources. While it is important to manage open space areas for multi-use, it is important to recognize that some uses are not always compatible in all areas. The physical, visual, and biological resources which attract many users to areas of open space can be degraded simply by the presence of more people.

Marine resources along the coast have been significantly degraded due to the magnitude of recreational use and associated human disturbance. As examples, California sea lions which historically hauled out along Point Dume have moved offshore due to continuing disturbance and the estuaries located at the mouths of Zuma Creek and Malibu Creek have become polluted not only by urban runoff, but by litter and other wastes introduced by recreational users.

In order to preserve the quality of the resources which people have come to expect from the Malibu area, it may be necessary to establish people at one time (PAOT) criteria for some areas of open space which have been severely effected. It may also be necessary to prohibit access to certain areas until they can be restored. Lastly, there should be continuing education programs for the residents of and visitors to Malibu that address the human impacts which affect local resources. Only through the use of mechanisms such as these can the Malibu area's resources and the recreational opportunities which they provide be preserved in perpetuity.

3.3.5 Limited City Resources

The limited financial resources of the City can restrict the City's ability to purchase fee title to land for open space and natural resource protection. However, a variety of other mechanisms can be utilized to provide for open space acquisition. These mechanisms include purchase of conservation easements, donations of land or conservation easements, transfer of development rights, impact mitigation fees, formation of local open space districts, inter-governmental agreements, and funding from state and federal agencies.

These mechanisms should be explored to the extent possible, especially given that the City may have a more immediate need to allocate funding to public services. Although

private development should not bear the cost of all open space acquisition, this source of funding can generally provide the most immediate source of funds for needs of this type.

3.3.6 Development Pressure and Rising Property Values

The preservation of open space and natural resources is also constrained by rising property values and strong development pressures that result in increased development. From 1980 to 1990 residential development increased (i.e. individual dwelling units) in Malibu by 10.6 percent. Development has occurred along the coast, in the canyons, and on the hillsides of Malibu. Along the coast there is a finite amount of land which can be developed. A significant amount of the land which is suitable for development has already been developed. The north side of Pacific Coast Highway appears to provide much of the existing opportunities for development in Malibu. However, environmental constraints indicated in the Land Use Element present obstacles to development in many of these areas. Due to demand for suitable land, land prices continue to rise, and in the absence of strong environmental regulation, development may begin encroaching on areas not subject to engineering-related environmental hazards, but which support sensitive natural resources. As an example, in 1992 two large residential developments in Trancas Canyon were approved. These areas both supported significant terrestrial and marine resources. As land prices continue to rise, difficult land use decisions involving sensitive or important natural resources are expected to increase.

The unrestricted loss of significant natural resources and open space would be expected to ultimately create diminished financial and aesthetic values for owners of developed property as well as for visitors to the City.

3.4 Goals, Objectives, Policies and Implementation Measures

CON GOAL 1: NATURAL RESOURCES PRESERVED AND PROTECTED.

CON OBJECTIVE 1.1: Natural resources managed in accordance with this comprehensive natural resources protection and management plan.

- CON Policy 1.1.1:** The City shall minimize disruption of natural systems and areas rich in biodiversity and avoid consumption of ecologically sensitive lands (e.g. Resource Protection Areas (RPAs) including ESHAs, significant watersheds, wildlife habitat linkages, disturbed sensitive resource areas, blueline streams and significant oak woodlands as designated on Figures CO-3 and CO-4 and Table 3-5).
- CON Policy 1.1.2:** The City shall protect riparian areas and undisturbed areas within significant watersheds and wildlife habitat linkages through the use of open space or conservation easements or equivalent measures.
- CON Policy 1.1.3:** The City shall protect and preserve, and where reasonable and feasible reclaim, the delicately balanced ecosystem of the Santa Monica Mountains and adjacent coastline area.
- CON Policy 1.1.4:** The City shall protect Environmentally Sensitive Habitat Areas (ESHAs) as a priority over development and against any significant disruption of habitat values.
- CON Policy 1.1.5:** The City shall protect and reclaim Malibu's threatened natural resources such as the beaches, estuaries, intertidal zone and marine habitats, estuaries, marine life, ocean, tidepools, streams, waterfalls, wetlands, wildlife and plant life and their habitats.
- CON Policy 1.1.6:** The City shall restore Disturbed Sensitive Resource Areas (DSRAs), to the extent feasible and ecologically desirable.

- CON Policy 1.1.7:** The City shall promote and maintain programs for interagency cooperation, both public and private, to accomplish comprehensive natural resource management.
- CON Policy 1.1.8:** The City shall protect land formations and soils by avoiding vegetation removal in RPAs and in other areas of high potential erosion hazard.
- CON Policy 1.1.9:** The City shall limit use of the natural resources based on level necessary to support the City's rural residential life style and ensure that those resources are used wisely and not abused.
- CON Policy 1.1.10:** The City shall maintain an Environmental Review Board (ERB) as a technical advisory committee as specified in the Land Use Element to ensure the protection of natural resources.

To implement these policies the City shall:

CON Implementation Measure 1: Designate the watershed as the basic biogeographic planning area for the protection, conservation and land management of Malibu's natural resources. (Figure CO-2 identifies the 64 major watersheds in the Malibu Coastal Zone.)

CON Implementation Measure 2: Encourage and support federal and state acquisition of property within ESHAs for preservation.

CON Implementation Measure 3: Seek federal, state and private funds to initiate and update environmental data, studies and maps and to implement programs.

CON Implementation Measure 4: Develop and adopt a watershed-wide cooperative program committed to the protection of natural resources, with Malibu Creek as the most immediate priority. The program shall seek the cooperation of adjacent jurisdictions in order to create uniform practices and protection measures.

CON Implementation Measure 5: Coordinate with volunteer organizations which offer programs or services that implement a City conservation policy to protect and preserve natural resources.

CON Implementation Measure 6: Identify and regulate point sources of pollution to protect riparian and marine areas.

CON Implementation Measure 7: Protect Las Flores Creek through remediation of the Rambla Pacifico landslide if federal funding is available.

CON Implementation Measure 8: Work with Ventura and Los Angeles counties and other agencies to ensure development of programs for the protection of the shoreline, especially the area between Yerba Buena and Point Mugu, including promotion of beach replenishment.

CON Implementation Measure 9: Adopt a Hillside Management Ordinance as a major component of watershed protection as specified in the Land Use Element.

CON Implementation Measure 10: Work with other agencies to monitor and adopt receiving water standards designed to protect biological resources against sources of contamination as specified in the Safety Element.

CON Implementation Measure 11: Seek recommendations from the ERB on resource management and protection programs.

CON OBJECTIVE 1.2: Wildlife and biota resources preserved, protected and reclaimed.

CON Policy 1.2.1: The City shall preserve wildlife habitats and habitat linkages.

CON Policy 1.2.2: The City shall protect, preserve and reclaim very threatened plant community types that occur in Malibu, as inventoried by the Department of Fish and Game (See Table 3-3) with special emphasis on these: Southern Coastal Bluff Scrub; Southern Dune Scrub, Valley Needlegrass Grassland; Southern Foredunes (Broadbeach); Venturan Coastal Sage Scrub; Coastal Brackish Marsh (Malibu Creek and Lagoon); Coastal and Valley Freshwater Marsh; Southern Willow Scrub; California Walnut Woodland; and Valley Oak Woodland.

CON Policy 1.2.3: The City shall mitigate net loss of very threatened plant communities.

CON Policy 1.2.4: The City shall regulate removal of vegetation in ESHAs.

CON Policy 1.2.5: The City shall discourage plant species which are invasive in the Santa Monica biogeographic area where such invasive plant species would degrade native plant communities.

- CON Policy 1.2.6:** The City shall discourage the use of insecticides, herbicides or toxic chemical substances (excepting non-regulated home pesticides) within the City or if ESHAs, raptors and other animals could be adversely affected, except in an emergency which threatens wildlife or the habitat itself.
- CON Policy 1.2.7:** The City shall reduce impacts resulting from night lighting so as not to disturb natural habitats.
- CON Policy 1.2.8:** The City shall protect stream bed gravel conditions in streams supporting steelhead trout.
- CON Policy 1.2.9:** The City shall apply setback requirements, determined by site specific analysis, to new septic systems for protection of oak and riparian woodlands, and to prevent lateral seepage into stream or coastal waters.

To implement these policies the City shall:

CON Implementation Measure 12: Support the creation of multi-species habitat preservation programs.

CON Implementation Measure 13: Support the National Park Service and California Department of Parks and Recreation's efforts to expand areas devoted to regional open space and protect wildlife habitats.

CON Implementation Measure 14: Support a development rights purchase program to retire development rights within the City's undeveloped areas.

CON Implementation Measure 15: Allow the most natural return of native plants in burn areas as the most rapid and effective way to revegetate those areas.

CON Implementation Measure 16: Disseminate information regarding the potential harmful effects of invasive plant species on native plant communities.

CON Implementation Measure 17: Develop a City permit procedure regulating the removal of such trees as heritage oaks, sycamores or other native trees.

CON Implementation Measure 18: Consult with California Department of Fish and Game and the U.S. Fish and Wildlife Service to update information on habitats for rare and threatened species and terrestrial plant communities.

CON Implementation Measure 19: Disseminate information about the potentially harmful effects of toxic chemical substances and safe alternative measures, including information about safe alternatives to toxics for home and garden use.

CON Implementation Measure 20: Coordinate City conservation policies with the Los Angeles County Fire Department and County Department of Forester and Fire Warden regulations.

CON Implementation Measure 21: Seek an agreement with Caltrans regulating the use of toxics in roadside weed abatement.

CON Implementation Measure 22: Regulate and limit the use of toxic substances by City employees and contractors in construction and maintenance of City-used or owned properties, facilities, trails and rights of way.

CON Implementation Measure 23: Incorporate the best mitigation measures feasible in channelizations, dams, or other substantial alterations of rivers and streams and limit them to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing development or public roadways in the floodplain is feasible and where such protection is necessary for public safety or (3) development where the primary function is the improvement of fish and wildlife habitat.

CON Implementation Measure 24: Offer incentives such as priority processing and reduced permit fees for use of non-toxic building materials, finishes and preservers.

CON Implementation Measure 25: Cluster development to preserve large, unbroken blocks of open space within habitat areas and to protect the integrity of habitat linkages, unless clustering would create urban development patterns within rural areas. Perimeter fencing shall be permeable so as not to prohibit wildlife movement.

CON Implementation Measure 26: Establish setbacks from riparian corridors and oak woodlands of no less than 100 feet where feasible to protect wildlife habitats.

CON Implementation Measure 27: Establish minimum setbacks of at least 100 feet from outer edge of existing riparian or oak canopy for leach fields and for seepage pits, where feasible.

CON Implementation Measure 28: Require all exterior lighting to be low intensity and shielded to reduce its visibility from surrounding areas and to minimize impact to wildlife. Maintain dark corridors as a priority.

CON OBJECTIVE 1.3: Marine and beach resources preserved, protected, enhanced and reclaimed.

- CON Policy 1.3.1:** The City shall prohibit uses of the marine environment that will have a significant adverse effect on the biological diversity and productivity of coastal waters.
- CON Policy 1.3.2:** The City shall protect beaches and sea cliffs in Malibu.
- CON Policy 1.3.3:** The City shall protect marine mammals and preserve their habitat.
- CON Policy 1.3.4:** The City shall protect and support restoration of all kelpbeds, wetlands, creeks and estuaries of Malibu.
- CON Policy 1.3.5:** The City shall protect all sea birds/shore birds and their nesting and roosting sites in ESHAs.
- CON Policy 1.3.6:** The City shall take the lead to reclaim and preserve the natural state of the Malibu Lagoon.
- CON Policy 1.3.7:** The City shall protect bluffs against erosion and beaches against siltation and loss of sand, caused by excessive disturbance of landforms.
- CON Policy 1.3.8:** The City shall prohibit the use of unnecessary seawalls and other shoreline structures.
- CON Policy 1.3.9:** The City shall require setbacks on beachfront property that anticipate beach erosion.
- CON Policy 1.3.10:** The City shall prohibit the disposal of untreated wastewater onto a beach, rocky coastal area, intertidal zone or into the ocean.
- CON Policy 1.3.11:** The City shall control surface runoff and associated pollutant loads into coastal waters, wetlands and riparian areas.
- CON Policy 1.3.12:** The City shall support scientific research and monitoring of marine resources.
- CON Policy 1.3.13:** The City shall enhance public awareness, appreciation and wise use of the marine environment.

To implement these policies the City shall:

CON Implementation Measure 29: Collect baseline data for all distinguishable coastal segments on the Malibu coast to define development standards, including standards to site wastewater drainfields.

CON Implementation Measure 30: Require peer review of coastal engineering reports for any proposed development that presents potentially significant beach erosion.

CON Implementation Measure 31: Require all structures to be sited landward of state owned tidelands and; in addition, for infill lots from a stringline drawn between the nearest corners of adjacent structures, whichever setback is greater; however, an additional setback may be required where necessary to protect the structure from anticipated beach erosion.

CON Implementation Measure 32: Prohibit seawalls unless a City employed or engaged coastal geologist has determined that there are no other less environmentally damaging alternatives for protection of on-shore development. Revetments, seawalls, cliff-retaining walls and other such construction shall be permitted only when required to serve coastal-dependent uses or to protect existing or new structures which constitute infill development.

CON Implementation Measure 33: Site shoreline structures such as piers, groins, breakwaters, drainages, seawalls and pipelines to avoid sensitive rocky points, tidepools and intertidal areas.

CON Implementation Measure 34: Require revetments, groins, cliff retaining walls, seawalls, pipelines, outfalls and other such construction that may alter natural shoreline processes to eliminate or mitigate adverse impacts on shoreline and sand supply.

CON Implementation Measure 35: Monitor other jurisdictions or public agencies' activities which may affect natural sand replenishment in Malibu.

CON Implementation Measure 36: Support new legislation and research to mitigate regional sand transport and supply impacts.

CON Implementation Measure 37: Seek grant funds to conduct regional sand resource studies.

CON Implementation Measure 38: Work with other agencies to encourage low intensity, passive recreational use on beaches which include sensitive rocky shoreline, tidepool or intertidal areas.

CON Implementation Measure 39: Identify and regulate threats to the intertidal zone and coastal waters.

CON Implementation Measure 40: Prohibit all vehicles except emergency vehicles on beaches adjacent to sensitive intertidal areas.

CON Implementation Measure 41: To protect wetlands, the intertidal zone and kelp beds from siltation, minimize the runoff and erosion caused by earth movement by requiring development to use best construction management practices.

CON Implementation Measure 42: Require grading plans for all new development to be designed to ensure that potential negative effects of runoff and erosion on sensitive resources are minimized.

CON Implementation Measure 43: Work with other agencies to protect the tidepools and kelp beds of Malibu's Marine Areas of Special Biological Significance (MASBS) between Latigo Point and Point Mugu against damage from excessive grading, stream pollution, and sewage outfalls.

CON Implementation Measure 44: Support efforts to monitor the conditions of the Malibu Coastal Zone nearshore species, water quality and kelp beds, and support rehabilitation or enhancement of deficient areas.

CON Implementation Measure 45: Work with the Department of Fish and Game to monitor the kelp harvesting industry to ensure that such activity will not reduce kelp bed size and range or its productivity as a fish nursery habitat.

CON Implementation Measure 46: Support the Santa Monica Bay Restoration Project's recommendation of rotational closure of certain portions of the intertidal zone and adjacent coastal waters to allow for the rehabilitation and restoration of these MASBS and intertidal ESHAs.

CON Implementation Measure 47: Prohibit permanent structures on a bluff face except for engineered staircases or accessways to provide public beach access where no feasible alternative means for public access exists.

CON Implementation Measure 48: Review proposed bluff-top development to scrutinize geologic stability, adequate structural setback and appropriate measures to prevent damage from runoff.

CON Implementation Measure 49: Require all structures to be set back a minimum of 25 feet from the top of a bluff or at a stringline drawn between the nearest corners of adjacent structures, whichever distance is greater but in no case less than would be allowed for a 75 year useful life for the structure, to prevent bluff erosion.

CON Implementation Measure 50: Work with other agencies to regulate and monitor marine mammal hauling grounds and apply ESHA protection policies to any hauling ground.

CON Implementation Measure 51: Prohibit the alteration or disturbance of marine mammal habitats.

CON Implementation Measure 52: Work with other agencies to ensure that all permitted uses in sensitive marine and beach habitats comply with U.S. Fish and Wildlife and the State Department of Fish and Game Regulations.

CON Implementation Measure 53: Support volunteer monitoring of marine mammal hauling grounds.

CON Implementation Measure 54: Support marine mammal rescue efforts.

CON Implementation Measure 55: Support efforts to establish a marine and mountain wildlife rescue rehabilitation center.

CON Implementation Measure 56: Establish a marine sanctuary.

CON Implementation Measure 57: Support organizations in their efforts to protect marine mammals from disturbance, harm or capture.

CON Implementation Measure 58: Establish 25 foot buffer zones from all sea/shore bird nesting and roosting areas; post signs, rope-off sensitive areas and take other appropriate measures to protect these areas.

CON Implementation Measure 59: Limit public access to cliff areas that contain sea/shore bird nesting and roosting sites.

CON Implementation Measure 60: Develop a plan for restoration of the Malibu Lagoon addressing the advantage of (a) constructing additional wetlands; (b) widening the existing estuary; (c) establishing receiving water standards; (d) requiring a drainage system for the Civic Center Area and other areas currently draining into the estuary and lower creek.

CON Implementation Measure 61: Explore the feasibility of obtaining management responsibility for all State parks including the Malibu Lagoon State Park.

CON Implementation Measure 62: Work with appropriate agencies to protect the mouth of Zuma Creek on the seaward side of the Pacific Coast Highway as an educational and ecological reserve.

CON Implementation Measure 63: In the marine area of biological and educational interest between Nicholas Canyon and Lechuza Point, work with appropriate agencies to define a program of public use that will not adversely impact the sensitive marine resources with particular interest to the sea lion hauling grounds.

CON Implementation Measure 64: Work with appropriate agencies to modify beach access at Nicholas Canyon County Park to directly connect the parking lot to the beach and discourage foot traffic through native ground cover.

CON Implementation Measure 65: Protect the underwater reefs and rock formations and the intertidal zone by prohibiting uncontrolled public access in the western portion of Paradise Cove.

CON Implementation Measure 66: Work with appropriate agencies to minimize vegetation disturbance, including recreation or foot traffic on vegetated areas on the Trancas Beach Coastal Dunes. Develop well defined and posted footpaths where access through dunes is necessary.

CON Implementation Measure 67: Work with appropriate agencies to implement measures to enhance the Zuma Beach Lagoon/Wetlands including, at a minimum, diverting foot traffic from the areas, prohibiting grading except for health and safety reasons, removing non-native weeds, and using the area for observation and education.

CON Implementation Measure 68: Work with appropriate agencies to ensure that Point Dume Headlands State Preserve, and adjacent bluff tops and cliffs, are managed to eliminate erosion and the loss of natural vegetation caused by foot paths through sensitive habitat areas and cooperative with other agencies to provide non-intrusive access.

CON Implementation Measure 69: Work with the State and County to limit access to the sensitive bluff and rocky shoreline habitat area in Latigo Point to minimize potential habitat degradation.

CON OBJECTIVE 1.4: Scenic resources preserved and protected.

CON Policy 1.4.1: The City shall identify, designate and protect distinct natural landform features as scenic resources.

CON Policy 1.4.2: The City shall protect viewsheds of the ocean and surrounding mountains and hillsides.

CON Policy 1.4.3: The City shall protect Pacific Coast Highway as a significant viewshed.

To implement these policies the City shall:

CON Implementation Measure 70: Map scenic resources and provide information to the public with regard to their locations.

CON Implementation Measure 71: Implement the Pacific Coast Highway utility undergrounding project.

CON Implementation Measure 72: Work with the Mountains Restoration Trust or other non-profit organizations to purchase vacant lots to protect designated scenic resources.

CON Implementation Measure 73: Work with Caltrans to create, where appropriate, median plantings of low growing, indigenous and/or resource efficient landscaping.

CON Implementation Measure 74: Require landscaping and berming to screen public parking from Pacific Coast Highway.

CON Implementation Measure 75: Provide public viewing locations as turnouts along major cross-mountain roads.

CON GOAL 2: CULTURAL RESOURCES PRESERVED AND PROTECTED.

CON OBJECTIVE 2.1: Historic, cultural and archaeological resources preserved for future generations and scientific study.

CON Policy 2.1.1: The City shall identify, designate, protect and preserve areas, sites or structures of historic, cultural, paleontological and/or archeological significance.

CON Policy 2.1.2: The City shall avoid the destruction or alteration of cultural resources.

CON Policy 2.1.3: The City shall provide incentives to property owners of historical structures to encourage preservation of designated cultural resources.

To implement these policies the City shall:

CON Implementation Measure 76: Work with appropriate agencies, such as UCLA Archeological Center, to keep current maps of significant archeological areas.

CON Implementation Measure 77: Maintain archives and a database of completed research and studies.

CON Implementation Measure 78: Review all applications for development to determine whether the development may have an adverse impact on cultural resources.

CON Implementation Measure 79: Require site surveys to be performed by qualified technical personnel for projects located in areas identified as archaeologically/ paleontologically sensitive. Data derived from such surveys shall be used to formulate mitigation measures for the project.

CON Implementation Measure 80: Adopt standards for replacement, expansion, remodel and restoration of designated historic structures to preserve integrity of design.

CON Implementation Measure 81: Cooperate with volunteer organizations to preserve and restore historic sites and structures.

CON Implementation Measure 82: Encourage proper curation and prohibit casual collection of significant artifacts.

CON Implementation Measure 83: Support the establishment of a museum/study center in the study area to display archeological/paleontological artifacts and to present continuing programs to acquaint the public with the cultural and historic value of these resources.

CON Implementation Measure 84: Explore all available measures, including purchase, tax relief, and purchase or transfer of development rights to avoid development on historic, prehistoric, archeological and other classes of cultural sites.

CON GOAL 3: ENERGY CONSERVED.

CON OBJECTIVE 3.1: Use of innovative, energy efficient techniques and systems.

CON Policy 3.1.1: The City shall educate the community regarding the importance of and techniques for energy conservation.

CON Policy 3.1.2: The City shall encourage state-of-the-art energy efficiency standards for all new construction design.

CON Policy 3.1.3: The City shall protect solar access.

CON Policy 3.1.4: The City shall encourage uses of solar and other non-polluting, renewable energy sources.

To implement these policies the City shall:

CON Implementation Measure 85: Work with the Chamber of Commerce and utility providers to conduct business energy audits to reduce consumption by 10% by the year 2001.

CON Implementation Measure 86: Provide information regarding tax advantages for use of state-of-the-art energy efficient systems.

CON Implementation Measure 87: Adopt and implement the Uniform Solar Code.

CON Implementation Measure 88: Secure and distribute government and utility publications and leaflets containing energy information, information about solar and other renewable energy sources.

CON Implementation Measure 89: Work with utilities including Southern California Edison and the Gas Company to promote programs benefiting Malibu residents.

CON Implementation Measure 90: Review development codes to assess energy conservation opportunities.

CON Implementation Measure 91: Enforce State "energy budget standards" for new construction which standards establish maximum allowable use from depletable sources.

CON Implementation Measure 92: Offer incentives such as priority processing and reduced permit fees for use of energy saving designs and devices.

CON GOAL 4: WATER CONSERVED.

CON OBJECTIVE 4.1: 10% reduction in the amount of water for residential and commercial uses by the year 2001 and a three day emergency water supply in all residential areas.

CON Policy 4.1.1: The City shall provide water for residents' needs in the most cost effective manner.

CON Policy 4.1.2: The City shall coordinate development to ensure adequate water supplies.

- CON Policy 4.1.3:** The City shall encourage water conservation design measures in residential, commercial and industrial development.
- CON Policy 4.1.4:** The City shall promote the use of water efficient low flow fixtures.
- CON Policy 4.1.5:** The City shall encourage the use of drought resistant landscaping.
- CON Policy 4.1.6:** The City shall promote the use of reclaimed water, that has had pathogens removed for appropriate uses such as landscape irrigation systems.
- CON Policy 4.1.7:** The City shall promote the use of greywater systems.

To implement these policies the City shall:

- CON Implementation Measure 93:** Disseminate information to the community regarding methods and technologies that conserve the use of water.
- CON Implementation Measure 94:** Provide water efficient demonstration gardens in local parks.
- CON Implementation Measure 95:** Work with appropriate agencies to maintain a leak detection program to eliminate water waste caused by leaking water lines and swimming pools.
- CON Implementation Measure 96:** Work with appropriate agencies to monitor water usage to detect leaks based on historic use and to assess the effectiveness of water conservation programs.
- CON Implementation Measure 97:** Support water pricing that provides incentives to use less water with appropriate exemptions for agricultural uses.
- CON Implementation Measure 98:** Explore alternate methods of providing water service, including establishing an independent water district or municipal water utility.
- CON Implementation Measure 99:** Monitor State and Federal water legislation to assure ongoing local supply and appropriate conservation.
- CON Implementation Measure 100:** Offer incentives such as priority processing and reduced permit fees for use of water saving designs and devices.

CON GOAL 5: SOLID WASTE REDUCED AND RECYCLED.

CON OBJECTIVE 5.1: 50% reduction in the amount of solid waste generated by the community and disposed of in land fills by the year 2000.

CON Policy 5.1.1: The City shall reduce solid waste.

CON Policy 5.1.2: The City shall encourage recycling.

CON Policy 5.1.3: The City shall encourage co-composting.

To implement these policies the City shall:

CON Implementation Measure 101: Work cooperatively with neighboring cities to reduce and possibly divert solid waste from landfills.

CON Implementation Measure 102: Disseminate information regarding recyclable materials and methods of reducing waste.

CON Implementation Measure 103: Promote the use of recycled goods through programs such as cooperative purchasing and use of recycled materials in City contracts like road construction.

CON Implementation Measure 104: Develop a program of commercial and residential curb-side recycling.

CON Implementation Measure 105: Initiate programs for collection and disposal of household hazardous waste.

CON Implementation Measure 106: Explore the possibilities of co-composting either within the City or in a cooperative arrangement with surrounding jurisdictions.

CON Implementation Measure 107: Offer incentives such as priority processing and reduced permit fees for use of recycled building materials.

APPENDIX A - Analysis of Sensitive Terrestrial Habitats by Location

Analysis of Sensitive Terrestrial Habitats by Location

Described below are those marine and terrestrial resources which were identified in the Malibu LCP Land Use Plan to meet the criteria and legal definitions of an environmentally sensitive area, as well as those areas adjoining sensitive habitat which are functionally related to, or act as a buffer to, the sensitive habitat area (Malibu Local Coastal Plan Research and Analysis and Appendices, October, 1992 by the Los Angeles County Department of Regional Planning Coastal Studies Section).

The following describes the environmentally sensitive terrestrial habitats in the Malibu Coastal Zone:

Arroyo Sequit: Arroyo Sequit supports some of the most extensive riparian and oak woodland and associated stream habitat (pools and waterfalls) in the MCZ. Dense thickets are located along the East Fork. Above the East Fork, the watershed is undisturbed with the exception of one small stretch of the canyon bottom which contains residential development and camps. The lower half of the canyon is within Leo Carrillo State Park and is undisturbed with the exception of campground facilities located on the canyon floor. Arroyo Sequit may continue to support steelhead.

Willow Creek: Located within Leo Carrillo State Park, this stream supports dense riparian willow thickets and some scattered trees.

San Nicholas Canyon: Coast live oak woodland and grassland are located in the uppermost portion of the canyon. The middle section supports diverse and dense riparian woodlands. The lower canyon still retains native trees, although the understory vegetation has been removed due to grading associated with a private recreational facility. Adjacent to the Pacific Coast Highway and extending southward across the highway to the canyon mouth is a less disturbed and more varied riparian woodland. Directly above the beach, at the mouth of San Nicholas Canyon are coastal bluffs which support stands of giant coreopsis and other sensitive coastal bluff plant species. There are also significant marine resources present at this beach.

Los Alios (Decker) Canyon: There is a diverse riparian woodland dominated by western sycamores and coast live oaks at the canyon bottom. Due to residential development in the vicinity of Decker School Road, the woodland has been altered significantly. The riparian woodland, which extends south of Pacific Coast Highway, contains numerous exotic trees, but is dominated by native western sycamores. Significant marine resources are found at this beach.

Lechuza Canyon: The Lechuza Canyon watershed is relatively undeveloped from the canyon bottom eastward. There are isolated homes in the western portion. Riparian woodland habitat and associated wildlife exist in the canyon while slopes on the east side support dense stands of coast live oak. A narrow, yet dense stand of riparian woodland extends south of the Pacific Coast Highway to near the beach.

Clyde Canyon: (Pedra/Pescador watershed, Malibu Wastewater Study, 1992) The Clyde Canyon drainage can be traced to Charmlee Meadows. The canyon bottom is intact riparian habitat with oaks, sycamores, ferns and other species typical of the habitat type. A rich diversity of wildlife has been observed in the canyon, including bobcat, mountain lion, deer, grey fox, coyote, ring-tail cat, bats, three species of owls, raptors including the golden eagle and kestrel, and *Carolella busckana*, a C2 candidate species for listing as a federally endangered species.

Encinal Canyon: The floor of this canyon contains dense coast live oak and western sycamore dominated woodland. There is residential development and associated grading on the ridge on the western side of the canyon, while the eastern side of the canyon is undeveloped. South of the Pacific Coast Highway, at the canyon mouth there are native riparian trees interspersed with planted ornamentals.

Steep Hill Canyon: The upper section of this corridor contains coast live oaks and western sycamores and is considered sensitive. The lower portion of the canyon however, is not considered sensitive as it is disturbed and dominated by non-native plants such as castor-bean, palms and eucalyptus.

Trancas Canyon: This canyon is one of the larger canyons in the MCZ. The upper half of the canyon contains scattered homes, ranches and recreational facilities, while the lower half remains relatively undisturbed. The canyon mouth is largely developed and suburbanized. The Trancas Canyon Watershed is drained by Trancas Creek, the major drainage course into the Trancas Lagoon. The estuary area occupies nine acres. The estuary is a disturbed environmental area which is targeted for restoration by the Santa Monica Bay Restoration Project with the objective of both enhancing the beauty of the area and creating a migration stopover for water fowl.

Additional resident reports about the Canyon resources provide a typical case study of the need for further research in the Malibu region. These reports include the following:

- ◆ Between Trancas Canyon Road and Lunita Road is a significant blue line stream with thriving native riparian

habitat at its mouth. The stream allows wildlife movement throughout the area.

- ◆ Within the Malibu West development some of the original flood plain vegetation, including sycamore trees and willows, still grow along with oaks within the development. The existing riparian woodland is dominated by coast live oaks and western sycamores.
- ◆ The flora of the undeveloped areas consist of mountain chaparral, coastal sage scrub, and grassland habitat. Diverse riparian vegetation including willows, sycamores, and live oaks, proliferate along the Trancas Creek inland of Malibu West and at the mouth of the blue line stream which defines Trancas and Lunita. Deeper into the Trancas Canyon area are oak woodlands.
- ◆ The abundance of vegetation and open space has resulted in the Trancas Canyon area becoming home to a number of species of wildlife, including deer, bobcats, raccoon, badger, grey fox, coyotes, hawks, eagles, owls, and a variety of snakes, lizards and frogs.

Zuma Canyon: Zuma Canyon is one of the most remote and least disturbed canyons in the Santa Monica Mountains. Coastal sage scrub and chaparral are scattered over the dry slopes, while the canyon bottom contains a diverse riparian woodland and freshwater pools. The pools scattered along the canyon's perennial stream support a distinctive freshwater fauna including western pond turtles and native fishes. Secretive species such as golden eagle (*Aquila chrysaetos*), bobcat (*Felis lynx*), and mountain lion (*Felis concolor*) continue to be sighted in Zuma Canyon. Historically, Zuma Canyon also provided nesting habitat for the peregrine falcon. The Zuma Canyon watershed does not have a significant amount of development. Existing development is confined to the upper and lower limits of this watershed. The upper watershed is developed with a small sewage treatment plant and some residential development. The southern end of the watershed is developed with residential uses. There is one other small developed area within the watershed while the remainder of the watershed is disturbed only by fire breaks and dirt roads. In the southern portion of the watershed the stream and associated riparian woodland have been retained in the residential area and constitutes a disturbed, yet significant streamside habitat. The mouth of Zuma Canyon contains a freshwater estuary and marsh, which is degraded, but has been funded for restoration by the Santa Monica Bay Restoration Project, the National Park Service and Los Angeles County.

abundant. The majority of the watershed is dominated by a diverse mosaic of chaparral, coastal sage scrub, grassland and native woodlands. Much of the watershed is remote and undisturbed, particularly the northwest and central portions. Malibu Creek, the largest creek in the Malibu area, is biologically distinctive due to the fact that it supports a very diverse flora and fauna which include a number of sensitive species. Malibu Creek also continues to sustain a native steelhead population. These steelhead are a remnant population which historically spawned in the upper reaches of the creek. The Rindge Dam has provided a barrier to these reaches since the 1920's, and any spawning which now occurs takes place below the dam. Malibu Canyon also provides habitat for wide-ranging species such as mountain lion and golden eagle. In addition, Malibu Lagoon is located at the mouth of Malibu Creek and is one of only two coastal marshes in Los Angeles County. Malibu Canyon and Malibu Lagoon have been affected by many human impacts including habitat removal, increased siltation, sewage effluent discharge, harassment of wildlife by domestic animals and people, and fragmentation by roads and residences. However, much of the watershed is still undisturbed. Development is concentrated in the extreme upper watershed (Monte Nido, Westlake Village, Agoura Hills, and Calabasas) and the extreme lower watershed (Civic Center area).

Carbon Canyon: The floor of Carbon Canyon is covered with riparian woodland, particularly in the upper sections of the canyon. The lowermost portion of the riparian corridor is disturbed with sparse development located adjacent to Carbon Canyon Road. The west side of the watershed is undeveloped while the east side contains residential development and Rambla Pacifico Road. Rock formations in the upper reaches of the canyon provide roosting and possibly nesting sites for sensitive birds of prey such as golden eagle, peregrine falcon and prairie falcon (*Falco mexicana*).

Cold Creek Canyon: Cold Creek Canyon is a relatively undisturbed watershed containing year-round water and supporting native vegetation and wildlife. Undisturbed stands of chaparral, oak woodland, coastal sage scrub, riparian woodland and associated wildlife occur in the canyon. The Cold Creek watershed is the last remaining watershed in the Santa Monica Mountains to support stoneflies (*Plecoptera*), a group of insects whose aquatic larvae are very sensitive to siltation and urban runoff containing petroleum based compounds. Many other locally uncommon species occur in this area including flowering ash (*Fraxinus dipetala*), redshank (*Adenostoma sparsifolium*), Channel Island mountain mahogany (*Cercocarpus betuloides* var. *blanchaea*), big leaf maple (*Acer macrophyllum*), interior live oak (*Quercus wizlizenii*), Humboldt lily (*Lilium humboldtii*) and stream orchid (*Epipactis gigantea*). In addition, several stands of native grassland support Lyon's pentachaeta (*Pentachaeta lyonii*) within this watershed. Native grassland and *Pentachaeta lyonii* are both uncommon within the Santa Monica Mountains. The central core of the Cold

Creek watershed is generally undisturbed and utilized only for natural resource oriented uses since much of it is in public ownership. However, residential development is present both in the upper and lowermost parts of the drainage basin.

Hepatic Gulch: This area is a small, steep hillside which supports an unusual blend of primitive moisture-requiring plant species. These species include mosses, liverworts, hornworts and ferns. These plants form an unusual association with drought-adapted species such as yucca (*Yucca whipplei*) and other coastal sage scrub species. This unique habitat has developed as a result of rapid runoff in the drainage channel. Hepatic Gulch is mapped as an SEA for these biological resources. However, the mapped location is not coincident with the actual location of the unusual vegetative association. The area has been affected by upstream drainage from an abandoned Nike Missile site, but now appears to be stable.

Piedra Gorda Canyon: Piedra Gorda Canyon is a small, undeveloped watershed. It supports scattered riparian trees and dense riparian thickets. Due to the degree of isolation, wildlife utilization is expected to be extensive.

Las Flores Canyon and Little Las Flores Canyon: The middle and upper portions of the canyon are remote and undisturbed, while the lower regions contain substantial development concentrated along Las Flores Road. The riparian woodland and associated stream habitat that extends upstream from the intersection of Gorge Road and Las Flores Canyon Road supports western sycamore, white alder, California bay, coast live oak and associated sensitive understory species.

Tuna and Pena Canyons: Tuna and Pena Canyons are adjoining watersheds which are almost completely undisturbed with the exception of concentrated ranch areas and Tuna Canyon Road. The canyons are considered sensitive because they support riparian woodlands, year-round water and the lack of significant development (with the exception of upper Tuna Canyon). The riparian woodlands include dense stands of western sycamore, coast live oak, California bay, white alder (lower half of Tuna Canyon), black cottonwood and giant chain fern. With the exception of off road vehicle tracks in the uppermost portion of the watershed, Pena Canyon is nearly undisturbed. There has been greater human impact in the northwest portion of Tuna Canyon, due to grading and grazing.

Topanga Canyon and Tributaries: Topanga Canyon is the largest coastal watershed in the MCZ and supports extensive riparian vegetation. There is localized residential development throughout the canyon and major holdings of public parklands. Diverse riparian woodlands with coast live oak, western sycamore, and stands of California bay, big leaf maple and cottonwood are

located on the canyon bottom and adjacent north-facing slopes. Dense native woodlands are also located in tributaries such as Red Rock, Hondo and Greenleaf. With the exception of Malibu Canyon, the greatest diversity of amphibian and reptile species in the Santa Monica Mountains are reported for this watershed. (The Distribution and Present Status of the Herpetofauna of the Santa Monica Mountains, Special Publication No. 2, Southwest Herpetological Society, 1986).

4.1 Introduction 4.1
4.1.1 General Purpose 4.1
4.1.2 Purpose and Scope 4.1

4.2 Circulation System 4.2
4.2.1 Introduction 4.2
4.2.2 General Purpose 4.2
4.2.3 Purpose 4.2
4.2.4 Purpose and Scope 4.2

CIRCULATION & INFRASTRUCTURE ELEMENT

Public Purpose and Information

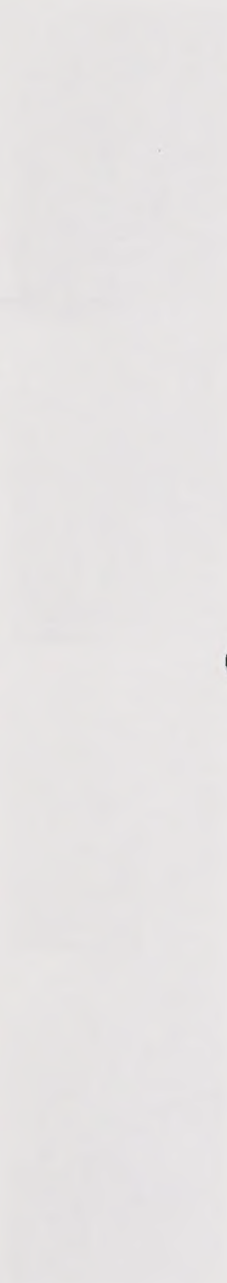
4.3 Public Purpose 4.3
4.3.1 Purpose 4.3
4.3.2 Purpose 4.3
4.3.3 Purpose 4.3
4.3.4 Purpose 4.3

Public Purpose, Purpose and Information

4.4 4.4
4.5 4.5
4.6 4.6
4.7 4.7
4.8 4.8

...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...
...the ... of ...

CIRCULATION & INFRASTRUCTURE ELEMENT



Circulation and Infrastructure Element Table of Contents

4.1	Introduction	4-1
4.1.1	Legislative Authorization	4-1
4.2.2	Purpose and Scope	4-1
4.2	Circulation System	4-2
4.2.1	Description of System	4-2
4.2.2	Level-of-Service	4-8
4.2.3	Scenic Highways	4-11
4.2.4	Parking	4-12
4.2.5	Public Transit Services	4-12
4.3	Public Services and Infrastructure	4-13
4.3.1	Fire Protection	4-13
4.3.2	Police Services	4-13
4.3.3	Schools	4-13
4.3.4	Hospitals	4-18
4.3.5	Libraries	4-18
4.3.6	Utilities	4-19
4.4	Goals, Objectives, Policies and Implementation Policies	4-21

Table of Contents

4.1	Introduction	4.1
4.2	4.1.1 Background and Objectives	4.2
4.3	4.1.2 Scope and Limitations	4.3
4.4	4.2 Literature Review	4.4
4.5	4.2.1 Theoretical Framework	4.5
4.6	4.2.2 Empirical Studies	4.6
4.7	4.2.3 Research Gaps	4.7
4.8	4.3 Methodology	4.8
4.9	4.3.1 Research Design	4.9
4.10	4.3.2 Data Collection	4.10
4.11	4.3.3 Data Analysis	4.11
4.12	4.3.4 Ethical Considerations	4.12
4.13	4.4 Results and Discussion	4.13
4.14	4.4.1 Descriptive Statistics	4.14
4.15	4.4.2 Inferential Statistics	4.15
4.16	4.4.3 Discussion of Findings	4.16
4.17	4.4.4 Limitations and Future Research	4.17
4.18	4.5 Conclusion	4.18
4.19	4.5.1 Summary of Key Points	4.19
4.20	4.5.2 Final Thoughts	4.20

4.1 Introduction

4.1.1 Legislative Authorization

Government Code Section 65302(b) requires the general plan to include:

a circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the land use element of the plan.

Additionally, Government Code Section 65303 is pertinent to the circulation element:

The general plan may...address any other subjects which, in the judgement of the legislative body, relate to the physical development of the county or city.

4.1.2 Purpose and Scope

The Circulation and Infrastructure Element which has been required to be included in the general plan since 1955 is not considered just a transportation plan. The element should address the circulation of people, goods, energy, water, sewage, and communications. The purpose of this element is to present a plan for ensuring that public transportation, services, and utilities are constantly available to permit orderly growth and to promote public health, safety, and welfare. The element provides a framework within which individual property owners can plan the development of their property and be assured that basic infrastructure and services are available and adequate. Individual service providers and property owners generally are not aware of citywide or regional issues that affect the ultimate users of their development. This element provides an area-wide assessment of the different public transit, services, and utilities for a broader understanding of service provision.

The Circulation and Infrastructure element sets forth policies and standards for the rational and cost-efficient provision and extension of public services to support planned development and protect natural resources. It addresses present conditions and concerns and sets measures for improvement. It is structured to accommodate future growth and development patterns. The purposes and goals of the other elements go hand-in-hand with the goals of the circulation and infrastructure element. Together, they will serve as a guide for decision making by public and private investors, and for the future expenditure of public funds.

Specifically, the Circulation and Infrastructure Element serves the following purposes:

1. As one of the state-mandated elements, it fulfills the requirements of the State Planning Act, and the regulations in Sections 65530 et seq. of the Government Code of the State of California.

2. The Circulation and Infrastructure Element evaluates the existing level of services of roads and public services and utilities in the city including vehicular roads, bike routes, bus service, water, sewer, police and fire protection, power, natural gas, telephone, solid waste disposal, cable, library, hospital and school services. It identifies concerns, deficiencies, needs and plans for meeting future needs.
3. The Circulation and Infrastructure Element informs the public of the goals, objectives, and policies of the city for maintenance and improvement of public services. It provides implementation measures and programs that will serve as a guide for the day-to-day operational decisions of city staff.

4.2 Circulation System

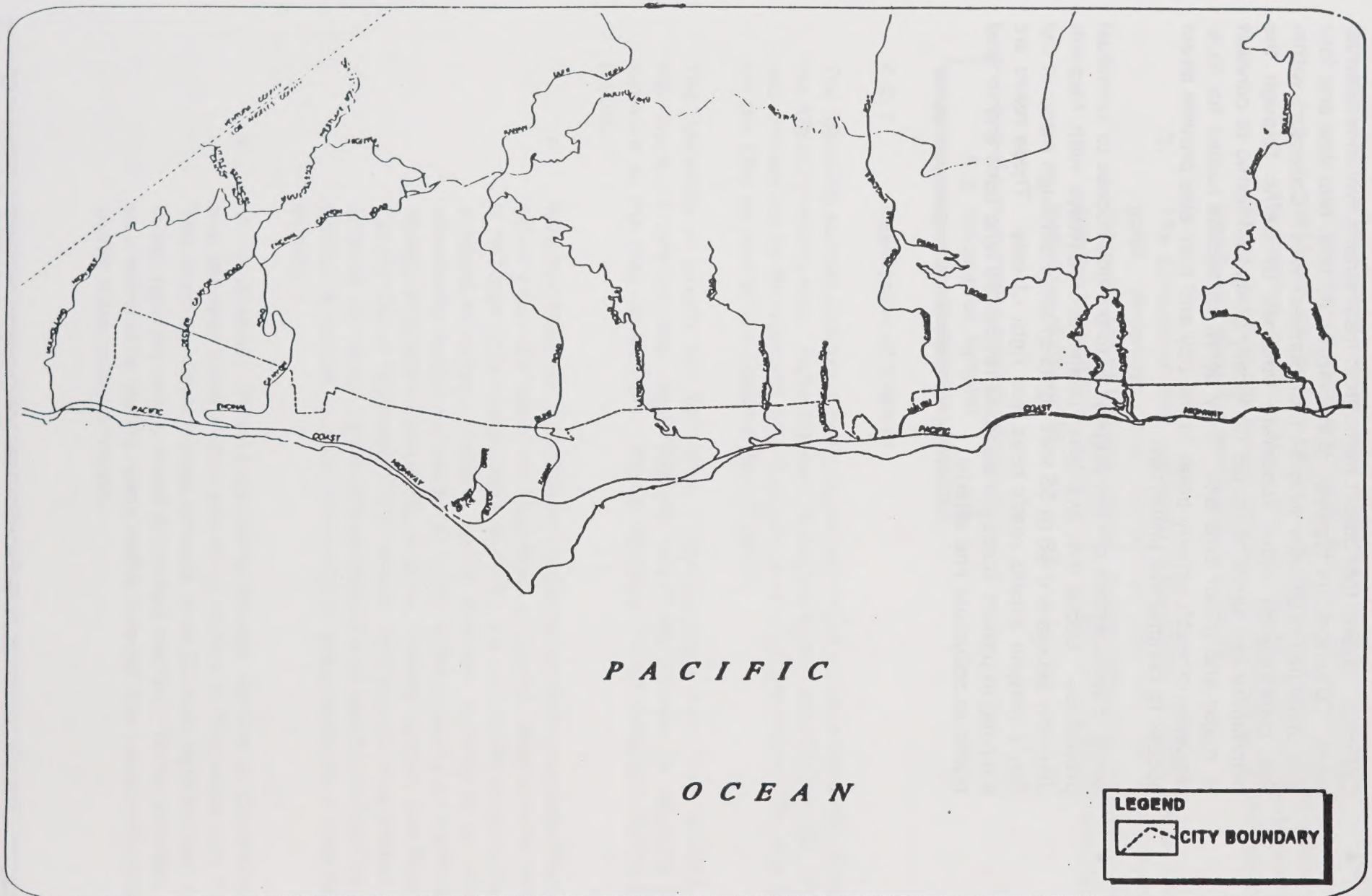
4.2.1 Description of System

The following section includes a brief description of circulation network found within the Malibu planning area. More detailed descriptions are contained in the Circulation and Infrastructure Background and Opportunities and Constraints Reports prepared for the City as part of the General Plan program.

The hierarchy of streets and highways in Malibu range from local streets to state highways. There are four classifications which summarize the existing roadway network in the City of Malibu - Major Arterials, Minor Arterials, Collectors, and Locals.

- **Modified Major Arterial:** Major roadways providing access from rural to urban areas and access to freeways. A typical major arterial consists of a 100 foot right-of-way with six lanes and controlled access, divided by a raised or striped median. Major arterials, serving as an intercity or community facility are expected to carry the majority of traffic between Malibu, adjacent communities, and the freeway system (see Figure CI-1). Pacific Coast Highway (PCH) would typically be designated a major arterial. However, given topographical and safety constraints, PCH in Malibu is limited to four lanes and is designated as a modified major arterial.
- **Minor Arterial:** Streets providing through service to commercial areas and between cities and/or providing access to highways and freeways. This roadway classification consists of an 80 foot right-of-way with four lanes, typically with a raised or painted median. Minor arterials, serving as a community facility, carry traffic through the community and collect traffic from collector roads.

- **Collector:** Streets that collect traffic from local streets within residential areas. Collectors are typically characterized by both two lane and four lane undivided roadways with 64 foot rights-of-way. Collectors within this classification move moderate volumes of traffic through the community and serve as routes for locally generated traffic to connect to major and minor arterials. They serve as access routes for local residents to reach activity areas in the city and may also provide direct access to commercial properties.
- **Local:** Streets whose primary purpose is to provide access to individual properties. Locals are two lane, undivided roadways with frequent driveway access and 48 to 58 foot rights-of-way, although many of the City's canyon access roads have less right of way. These roads are intended to provide access to adjacent residential land uses and to feed traffic to collectors and arterial.



SOURCE: HARLAND BARTHOLOMEW AND ASSOCIATES

MAJOR ARTERIAL ROADWAY NETWORK

BARTON-ASCHMAN ASSOCIATES, INC.

CITY OF MALIBU GENERAL PLAN



FIGURE

FIGURE CI-1

The existing roadway network in the City of Malibu and its vicinity is shown on Figure 4-1. The arterial network in Malibu consists of Pacific Coast Highway, a major four-lane state highway running the length of the City, and winding, mountainous, two-lane roadways with sharp turns, steep grades, and poor sight distance.

The following is a description of the existing roadway network serving the City of Malibu.

- *Santa Monica Freeway (I-10)* is a six-lane east-west freeway providing access to downtown Los Angeles. The freeway ties into the San Diego freeway (I-405) and, further to the east, the Harbor Freeway (I-110) and a chain of freeways in the vicinity of downtown Los Angeles. Near the coast, the Santa Monica freeway and State Highway 1 - Pacific Coast Highway (PCH) merge, serving the city as a four-lane roadway. The Santa Monica Freeway carries about 143,000 vehicles per day (Source: Caltrans, 1990) at its junction with PCH. Santa Monica Freeway is a designated route within the Congestion Management Program for Los Angeles County's roadway system.
- *Ventura Freeway (US 101)* is an eight-lane east-west freeway north of the City of Malibu. It provides access to Ventura County to the west and San Fernando Valley and the Los Angeles metropolitan area to the east. Interchanges at Topanga Canyon Boulevard, Las Virgenes Road (Malibu Canyon Road) and Kanan Road provide access to and from the City of Malibu. The Ventura Freeway carries approximately 187,000 and 149,000 vehicles per day (Source: Caltrans, 1990) at its junctions with Topanga Canyon Boulevard and Las Virgenes Road, respectively.
- *Pacific Coast Highway (PCH) (State Route 1)* is a four-lane state highway traversing the city from east to west along the Pacific Coast. The right-of-way includes an intermittent center turning lane. Within the city, PCH is about 25 miles long with a posted speed limit between 45 and 55 miles per hour. PCH is the only major arterial within the city. It serves mostly commuters during the weekday peak hours. In the summer months, it serves as an access route to the beaches along the coast. Peak periods for visitor traffic are on weekends and coincidental with the weekday afternoon commuter peak period. PCH has an average daily traffic level varying between 18,000 vehicles per day at its junction with Decker Canyon Road and 52,000 vehicles per day (Source: Caltrans, 1990) at its junction with Cross Creek Road. PCH carries approximately 47,000 vehicles per day (Source: Caltrans, 1990) at its junction with Las Flores Canyon Road. PCH also carries approximately 56,000 vehicles per day (Source: Caltrans, 1990) at its junction with Topanga Canyon Road. In the peak months, PCH carries approximately 57,000 vehicles per day in the vicinity of Cross Creek Road. (Source: Caltrans, 1990). Left-turn lanes are provided at major intersections, and an intermittent center lane serves as a turn lane for

developments along the highway. PCH is a designated bicycle route. Trucks over three axles are not permitted on PCH except for local delivery. PCH is a designated route within the Congestion Management Plan for Los Angeles County's roadway system.

- *Topanga Canyon Road (State Route 27)* is a two-lane roadway just outside the eastern city border. Topanga Canyon Road starts at PCH and extends north to the San Fernando Valley, thus providing regional access to a predominantly residential neighborhood just outside the City of Malibu. It interchanges with the Ventura Freeway (Hwy 101), and further north with Highway 118. At Pacific Coast Highway, Topanga Canyon Road is signalized and left-turn lanes are provided. Near PCH, Topanga has an average daily traffic (ADT) of about 14,000 vehicles (Source: Caltrans, 1990). North of Malibu, in the Woodland Hills area, Topanga becomes a four-lane arterial carrying about 30,000 vehicles per day (Source: Caltrans, 1990) near the Ventura Freeway. The posted speed limit is 35 mph. Topanga Canyon Road is a designated route within the Congestion Management Plan for the Los Angeles County roadway system.
- *Malibu Canyon Road (County Highway N1)* is a north-south arterial that extends from PCH to Highway 101 across the Santa Monica Mountains. Malibu Canyon Road has generally one lane in each direction. It is a four-lane roadway between PCH and Civic Center Way. It provides access to Pepperdine University, Malibu Creek State Park located just north of the City, and to Hughes Research Center, just inside the City Limits. At its intersections with Pacific Coast Highway and Civic Center Way, Malibu Canyon Road is signalized. Near Mulholland Highway, Malibu Canyon becomes Las Virgenes Road, which interchanges with the Ventura Freeway. It provides regional access to communities south of the Ventura Freeway including Soka University. It is estimated that Malibu Canyon Road carries about 9,400 vehicles per day near PCH (Source: L.A. County Public Works, 1991) on a typical weekday. Also, Malibu Canyon Road is estimated to carry 19,600 vehicles per day north of Civic Center Way (Source: L.A. County Public Works, 1991). Malibu Canyon Road serves both local and through trips. Through trips are those trips which have both origin and destination outside the City of Malibu. A significant portion of through trips access western portions of Los Angeles County outside Malibu from the areas around the Highway 101 corridor through the various canyon roads like Malibu Canyon Road. This is also referred to as Z-traffic. Further, a significant number of Z-trips access PCH from Malibu Canyon Road via Civic Center Way, thence Webb Way.

- *Corral Canyon Road* is a two-lane north-south arterial connecting the Santa Monica Mountains National Recreation Area, located north of the city, with Dan Blocker State Beach and Solstice Canyon Park. Further north, Corral Canyon Road provides access to Malibu Creek State Park, where it ends. Corral Canyon Road carries approximately 120 vehicles during the AM Peak Hour (Source: L.A. County Public Works, 1991).
- *Latigo Canyon Road* is a two-lane roadway oriented in the southeast/northwest direction. It begins at Pacific Coast Highway and goes northwest across the Santa Monica Mountains, meeting Kanan Dume Road near the intersection at Mulholland Highway. This roadway serves mostly residents of Latigo Canyon. The posted speed limit varies from 10 to 20 miles per hour. It is estimated that Latigo Canyon Road carries about an average daily traffic volume of approximately 1000 vehicles per day north of Pacific Coast Highway, and about 300 vehicles per day near Kanan Dume Road. (Source: L.A. County Public Works, 1991).
- *Kanan Dume Road (County Highway N9)* is a four-lane highway extending from PCH in the south to Ventura Freeway in the north. It provides on/off ramps to the Ventura Freeway. It also provides regional access across the Santa Monica Mountains into the Malibu area. Kanan Dume Road connects Agoura with Malibu. It provides access to the beach. It becomes Kanan Road in the Seminole Hot Springs area north of Mulholland Highway. Within the City limits, Kanan Dume Road is a City road and not a County road. In the vicinity of PCH, Kanan Dume Road has four travel lanes. The intersection of Kanan Dume Road and PCH is signalized, and left-turn lanes are provided. A runaway vehicle escape median (Truck Arrestor) is provided on Kanan Dume Road at PCH. Vehicles of weight over 8,000 lbs. or over two axles are not allowed on Kanan Dume Road. Kanan Dume Road carries approximately 500 vehicles north of PCH during the A.M. Peak Hour. (Source: City of Malibu, Traffic Counts 1992). Kanan Dume Road serves both local and through trips ("Z-traffic"). South of Latigo Canyon Road, Kanan Dume Road carries an average daily traffic volume of approximately 5,400 vehicles per day. (Source: LA County Public Works, 1991).
- *Decker Road (State Route 23)* is a two-lane winding undivided roadway extending from Pacific Coast Highway to Mulholland Highway just north of the city limit. Decker Road merges with Mulholland Highway just north of its intersection with Lechusa Road. At Pacific Coast Highway, Decker Road is stop-controlled, and has an ADT of approximately 1,200 vehicles (Source: Caltrans, 1990). Decker Road is a designated scenic route. It is also a designated route within the Congestion Management Plan for Los Angeles County's roadway system.

- *Encinal Canyon Road* is a north-south, two-lane roadway providing a connection between PCH and Mulholland Highway. Near Decker Road, Encinal meets Lechusa Road, which meets Decker Road, and continues east to Saddle Rock where it merges with Mulholland Highway. Encinal Canyon Road is stop-controlled at PCH. It is estimated from counts that Encinal Canyon Road carries about 1,200 vehicles per day near PCH (Source: L.A. County Public Works, 1991).
- *Mulholland Highway* is a two-lane arterial which extends southeast from PCH to Topanga Canyon Boulevard. Mulholland Highway starts as a north-south route just west of the city limit, then merges with Decker Road and Encinal Canyon Road further east, and continues east to Calabasas Highlands. At PCH, Mulholland Highway is stop-controlled. It connects major areas of state and local parks. Mulholland Highway is a designated scenic route.
- *Cross Creek Road* is a two-lane roadway connecting various developments in the Malibu Civic Center area to Malibu Canyon Road via Civic Center Way and to Pacific Coast Highway. The Cross Creek Road intersection with PCH is signalized. Cross Creek Road is a public roadway for a two block length serving commercial developments by PCH and a private road serving the residential area of Sierra Retreat. In the vicinity of PCH, Cross Creek Road is estimated to carry 9,300 vehicles per day (Source: L.A. County Public Works, 1991).
- *Las Flores Canyon Road* is a winding, two-lane roadway that intersects PCH in Malibu and Rambla Pacifica north of the city limits. The Rambla Pacifica and Las Flores Canyon Road intersections with PCH are both signalized, and operate with a single signal controller. North of PCH, Las Flores Canyon Road carries approximately 3,000 vehicles per day (Source: L.A. County Public Works, 1991). At this time, Las Flores Canyon also carries traffic from Rambla Pacifica neighborhood since Rambla Pacifica was closed due to slide activity.
- *Civic Center Way* is a east-west two-lane undivided roadway that connects Malibu Canyon Road and Cross Creek Road. It serves Malibu Civic Center traffic as well as Z-traffic traveling to and from Malibu Canyon Road to PCH. It intersects with Malibu Canyon Road at a signalized intersection. It extends further to the east through Stuart Ranch Road/Webb Way to Cross Creek Road. The posted speed limit is 40 mph except for a short segment from Vista Pacifica Street to Malibu Canyon Road where the speed limit is 25 mph in the school zone only.
- *Trancas Canyon Road* is a winding, two lane undivided, mountainous roadway that extends north from Pacific Coast Highway to Santa Monica Mountains National Recreational Area. It intersects with PCH at a signalized intersection. It serves a primarily residential area.

4.2.2 Level of Service

The concept of level of service (LOS) is normally used to describe the ability of a roadway to accommodate prevailing traffic volumes at the critical intersections based on the physical characteristics of the roadway. LOS ranges from "A" (which represents uncongested free-flow conditions) to "F" (representing total breakdown with stop-and-go operation). LOS definitions are presented in more detail in Table 4-1. Caltrans has established that State Highways intersections have reached capacity when their LOS declines to E and that an acceptable operation on Pacific Coast Highway is LOS D. Pacific Coast Highway in Malibu has been defined by Caltrans to be in an urbanized area. Table 4-1 describes the relationship between operating characteristics and the volume-to-capacity (V/C) ratios for the various Levels of Service as defined in the Congestion Management Program for Los Angeles County, Final Draft, September 1992. These definitions are related to how well intersections function. The Institute of Transportation Engineers (ITE) offers additional definitions for Level-of-Service in its literature. The ITE definitions describe roadway segment function, a standard used in many other states.

Traffic counts comprising of a typical weekday A.M. and P.M. Peak Hour counts were compiled at all the major intersections along Pacific Coast Highway within the City of Malibu. The data was primarily compiled from the California Department of Transportation (Caltrans) and previous studies by Barton-Aschman Associates, Inc. This information was supplemented by traffic count data collected by Wiltec and Willdan Associates. In addition, a field reconnaissance on Pacific Coast Highway was conducted. The intersection data compiled from the above sources was updated to 1992 base year conditions by applying the regionally accepted ambient growth rate wherever necessary.

The various intersections analyzed in this study include the following:

- Pacific Coast Highway at Topanga Canyon Road.
- Pacific Coast Highway at Las Flores Canyon Road/Rambla Pacifica
- Pacific Coast Highway at Malibu Canyon Road
- Pacific Coast Highway at Corral Canyon Road
- Pacific Coast Highway at Latigo Canyon Road
- Pacific Coast Highway at Zumirez Drive
- Pacific Coast Highway at Kanan Dume Road
- Pacific Coast Highway at Encinal Canyon Road
- Pacific Coast Highway at Decker Road
- Pacific Coast Highway at Mulholland Drive

The intersections of PCH with Mulholland Highway and Topanga Canyon Boulevard are located outside the City limits. For the purposes of this study, both signalized and unsignalized intersections were analyzed using the "Intersection Capacity Utilization" technique. The capacity values used for unsignalized intersections were lower than those used for signalized intersections.

Table 4-2 summarizes the existing levels of service at all the intersections listed above. The time periods analyzed are the AM and PM peak hours on a typical workday. In general, during the time periods analyzed all the intersections except one (PCH and Topanga Canyon) are operating at levels of service acceptable to Caltrans. The PCH intersection with Topanga Canyon is operating at level of service F in the AM peak hour and D in the PM peak hour. The PCH/Las Flores Road intersection is operating at level of service C in the AM peak hour and D in the PM peak hour.

Traffic conditions are expected to worsen in the future with or without buildout. However, the City is limited in what it can do to address the problem. Many of the roadways within Malibu are under the jurisdiction of either the State or the County. As regional growth increases, commuters will continue to utilize PCH as an alternative route to and from Los Angeles and visitors to beaches and regional parks in the City will increase; at the same time, the City does not expect the capacity of PCH to substantially increase. The City of Malibu considers itself as a rural rather than urban area and has adopted land use designations that will minimize traffic from resulting development in the City as much as possible but recognizes that the City will be forced to accept some of the expected regional traffic impacts because they are beyond the City's control. To the extent feasible and taking into account the other goals and policies of this Plan, the City will work to mitigate traffic impacts by cooperating with Caltrans and other surrounding jurisdictions, by ensuring adequate infrastructure for new development and by considering the adoption of a fee on proposed development to mitigate traffic impacts and fund necessary infrastructure improvements.

Table 4-1
Intersection Level-of-Service Definitions

LEVEL OF SERVICE	VOLUME-TO CAPACITY (V/C) RATIO	OPERATING CONDITIONS
A	0.00-0.60	At Level-of-Service A there are no cycles which are fully loaded, and full are even close to loaded. No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication. Typically the approach appears quite open, turning movements are easily made, and nearly all drivers find freedom of operation.
B	0.60-0.70	Level-of-Service B represents stable operation. An occasional approach phase is fully utilized and a substantial number are approaching full use. Many drivers begin to feel somewhat restricted within platoons of vehicles.
C	0.70-0.80	In Level-of-Service C station operation continues. Full signal cycle loading is still intermittent, but more frequent. Occasionally drivers may have to wait through more than one red signal indication, and back-ups may develop behind turning vehicles.
D	0.80-0.90	Level-of-Service D encompasses a zone of increasing restriction approaching instability. Delays to approaching vehicles may be substantial during short peaks within the peak period, but enough CKX with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive back-ups.
E	0.90-1.00	Level-of-Service E represents the most vehicles that any particular intersection approach can accommodate. At capacity ($V/C = 1.00$) there may be long queues of vehicles waiting upstream of the intersection and delays may be great (up to several signal cycles).
F	> 1.00	Level-of-Service F represents jammed conditions. Back-ups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the approach under consideration; hence, volumes carried are not predictable. V/C values are highly variable, because full utilization of the approach may be prevented by outside conditions.

Source: Congestion Management Program for Los Angeles County Final Draft, September 1992.

Table 4-2: Existing Levels of Service

INTERSECTION	AM PEAK HR		PM PEAK HR	
	V/C	LOS	V/C	LOS
PCH/Topanga Canyon Boulevard	1.18	F	0.82	D
PCH/Las Flores Canyon Road	0.74	C	0.81	D
PCH/Malibu Canyon Road	0.59	A	0.66	B
PCH/Corral Canyon Road	0.45	A	0.52	A
PCH/Latigo Canyon Road	0.50	A	0.49	A
PCH/Zumirez Drive	0.56	A	0.50	A
PCH/Kanan Dume Road	0.46	A	0.55	A
PCH/Encinal Canyon Road	0.31	A	0.44	A
PCH/Decker Road	0.30	A	0.35	A
PCH/Mulholland Highway	0.17	A	0.22	A

Source: Barton-Aschman Associates, 1992

4.2.3 Scenic Highways

A primary component of many outdoor recreation activities is movement or travel. One of the most popular forms of outdoor recreation in southern California is driving for pleasure. The travel to and from recreational areas is considered a major part of the landscape system, both as a connecting element and as landscape. A scenic highway presents opportunities for visual stimulation from automobiles or tour buses. In the Malibu area, views from the roads are characterized by panoramic vistas of both steep canyon slopes covered with native vegetation and the Pacific Ocean. Although development along the coast has significantly reduced views of the ocean in some areas of Malibu, there is an opportunity for public investment to ensure the preservation of many existing views. Many roads in Malibu are considered scenic, but only the Pacific Coast Highway has been officially designated as an eligible scenic highway by the California Department of Transportation. Official designation of scenic highways is conducted by the State Scenic Highway Advisory Committee.

There are no specific regulations that define the visual characteristics which qualify a road as a scenic highway, but the following parameters are often employed:

- Visibility - The driver should be able to experience scenery without having to stop or significantly change the necessary angle and duration of vision required for safe driving.
- Landforms - This parameter includes the physical characteristics of the natural corridor, such as gently rolling hills or rugged cliffs, streams, geologic formations, and distant ridges.
- Vegetation - This parameter includes the type of vegetation within view, such as row crops, orchards, chaparral or woodlands.
- Structures - Buildings may be included in scenic corridors and may add to scenic quality.

- Panoramas - Scenic overlooks with panoramic views of urban, rural, or natural areas should be included when available.

The Scenic Highways Element of the Los Angeles County General Plan has identified 21 roads in the Malibu Coastal Zone as potential scenic highways. The scenic roads within the City of Malibu are:

- | | |
|-------------------------|--------------------------|
| ● Pacific Coast Highway | ● Tuna Canyon Road |
| ● Kanan Dume Road | ● Corral Canyon Road |
| ● Malibu Canyon | ● Latigo Canyon Road |
| ● Birdview Avenue | ● Cliffside Drive |
| ● Encinal Canyon Road | ● Saddle Peak Road |
| ● Decker Road | ● Rambla Pacifico Road |
| ● Cold Canyon Road | ● Las Flores Canyon Road |

Many of these scenic roads not only enhance the quality of the recreation experience, but also provide the kind of "open space system" that organizes and communicates the coherence and identity of the region.

4.2.4 Parking

On-street parking is allowed at various locations within the City of Malibu, either on one or both sides along PCH (see Figure 4-2.) PCH serves as the major route of access to the various beaches and beach side facilities within the City of Malibu. Also, there are several surface parking lots on the beach side of PCH within Malibu. On-street parking on Pacific Coast Highway has exacerbated peak hour traffic congestion as people look for spaces, and get in and out of their vehicles. This parking arrangement has encouraged jay walking creating hazards for pedestrian and driver alike. The Local Coastal Plan must include sufficient parking for visitors.

The approximate locations of on-street and off-street parking along PCH within the City of Malibu are shown in Figure CI-2. Except for a short segment of PCH just east of Big Rock Drive, on-street parking is allowed on either side of PCH from the eastern boundary of the City of Malibu to Corral Canyon Road. Parking is not allowed on either side of PCH between Busch Drive and Morning View Drive, and also in the vicinity of Trancas Canyon Road. Also, on-street parking is not allowed on the oceanside of PCH for a small segment just east of Encinal Canyon Road, and is restricted on the oceanside of PCH at Zuma Beach.

4.2.5 Public Transit Services

The City of Malibu is currently served by the Los Angeles County Metropolitan Transportation Authority (MTA), which operates an intercity express bus route from Los Angeles to Trancas Canyon Road. Figure CI-3 shows the transit line #434. Para transit services are also provided in the city. These services are operated by Babaeian Transportation under contract with the City.

4.3 Public Services

4.3.1 Fire Protection

The Los Angeles County Fire Department provides fire protection service to the City of Malibu. Currently, four stations (Nos. 70, 71, 88 and 99) directly serve the City but all Los Angeles County Fire Department resources are available to serve the City.

The adequacy of fire protection services is assessed according to standards of response distance from a fire station. The distance standards vary according to the type and intensity of residences (see Table 4-4). Table 4-4 summarizes the equipment and staff resources at each station. As shown, there are a total of seven engine companies which are staffed with firefighters in and near the City of Malibu during each shift.

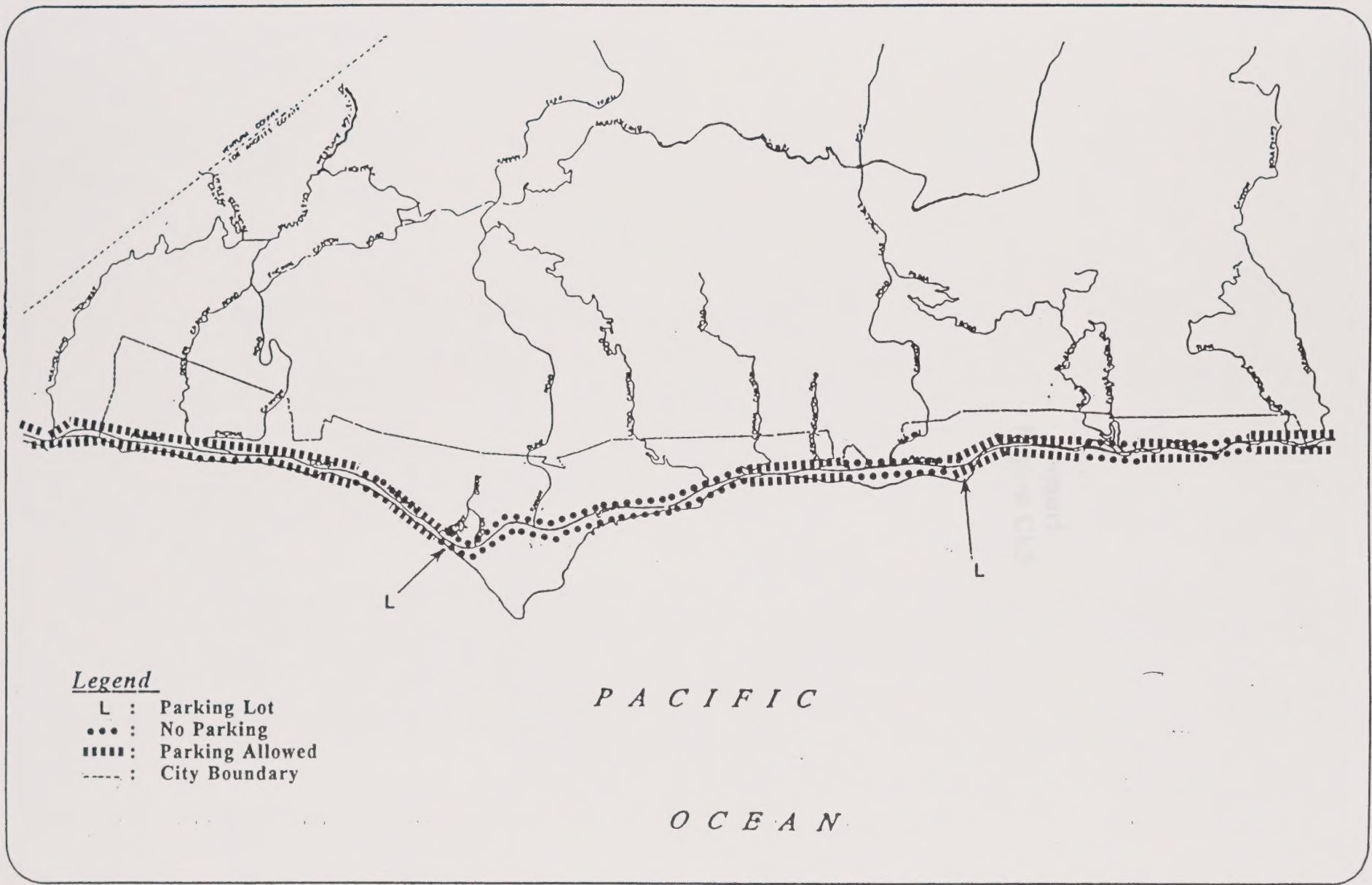
In the event of a major fire, additional equipment is kept in reserve at most of the stations to be used by off-duty firefighters. The Ventura County Fire Department's staff indirectly provides fire protection services to the Santa Monica Mountains by protection and control of fires on adjacent lands. The United States Park Service also provides additional fire protection.

4.3.2 Police Services

The City of Malibu is served by the Los Angeles County Sheriff's Department. The sheriff operates a station in the Lost Hills area north of the City; the County recently closed their station in the Civic Center. Police protection in the City is hampered by the length of the City and its relatively low density. The secluded orientations of many residential neighborhoods provide little or no opportunity for regular visual inspection from major arterial roadways. Average response time is within normal range because the Lost Hills station is fully staffed.

4.3.3 Schools

The elementary schools and high school district in Malibu are served by the joint Santa Monica-Malibu Unified School District, an independent agency governed by a Board of Trustees. Enrollment has increased substantially since 1980. The classrooms in Malibu are nearing capacity due to population increases. There are two elementary schools in Malibu run by the Santa Monica-Malibu Unified School District; Cabrillo Elementary and Webster Elementary. Both schools are now experiencing increasing levels of enrollment. During the 1995 school year both schools experienced an increase of approximately 30 students. Some of this increase is from students who do not live in Malibu. The schools each accept students from other districts if their parents work or have some type of child car arrangements in Malibu. Existing and proposed student enrollment is listed below in Tables 4-6 and 4-7. A third elementary school on Point Dume was closed in the 1980s due to lack of students and is now operated as a community center. This site is still owned by the school district.



APPROXIMATE LOCATIONS OF PARKING ALONG PACIFIC COAST HIGHWAY

BARTON-ASCHMAN ASSOCIATES, INC.

CITY OF MALIBU GENERAL PLAN



FIGURE

FIGURE CI-2

CHAPTER 10: THE BINOMIAL THEOREM

The Binomial Theorem is a powerful tool for expanding powers of a binomial expression. It states that for any real numbers x and y , and any positive integer n , the following expansion holds:

$$(x + y)^n = \sum_{k=0}^n \binom{n}{k} x^{n-k} y^k$$

where $\binom{n}{k}$ is the binomial coefficient, defined as:

$$\binom{n}{k} = \frac{n!}{k!(n-k)!}$$

The binomial coefficients can be calculated using Pascal's Triangle, which is a triangular array of numbers. The n th row of Pascal's Triangle contains the binomial coefficients $\binom{n}{0}, \binom{n}{1}, \dots, \binom{n}{n}$.

For example, the expansion of $(x + y)^3$ is:

$$(x + y)^3 = \binom{3}{0} x^3 y^0 + \binom{3}{1} x^2 y^1 + \binom{3}{2} x^1 y^2 + \binom{3}{3} x^0 y^3$$
$$= x^3 + 3x^2 y + 3x y^2 + y^3$$

1942-1943

Table 4-4
Fire Stations Serving Malibu

Station No.	Equipment	Station Staff	Avg. Resp. Time*	Total # of Fires 1991
Station 67- Calabasas** 25801 Pyuma Road	1 Fire Engine 1T 125 Ladder 1 Patrol (Unstaffed)	1 Captain 1 FFS 1 FF	5 minutes	51
Station 69- S. Topanga** 401 S. Topanga Canyon	1 Fire Engine 2 Patrol (1 Unstaffed) Reserve 1 Engine	1 Captain 1 FFS 2 FF	5 minutes	NA
Station 70- Malibu 3970 Carbon Cyn. Road	1 Fire Engine 1 Patrol 1 BC Car 1 Utility Vehicle 1 USAR Trailer Reserve 1 Engine 1 Water Tender 1 BC Car	1 Battalion Chief 1 Captain 1 FFS 2 FF	3 minutes	37
Station 71- Malibu 28722 W. PCH	1 Fire Engine 1 Paramedic 1 Patrol (Unstaffed)	1 Captain 1 FFS 3FF/PM	3 minutes	18
Station 72- Malibu** 1832 S. Decker Road	1 Fire Engine Reserve 1 Patrol 1 Engine	1 Captain 1 FFS 1 FF	5 Minutes	37
Station 88- Malibu 23720 W. Malibu Road	1 Telesquirt 1Paramedic	1 Captain 1 FFS 3 FF/PM	3 Minutes	40
Station 99- Malibu 32550 PCH	1 Fire Engine Reserve 1 Engine 1 Patrol	1 Captain 1 FFS 1 FF	3 Minutes	11
* Response time varies due to the location of event. Time is longer for events in the canyons, and shorter for events along the coast. ** Not located within Malibu City Limits FF Firefighter FFS Firefighter specialist/engineer PM Paramedic NA Information not available				
Source: Los Angeles County Fire Department, 1995				

Table 4-5 Desired Fire Response Distance For Residential Developments		
Housing Type	Density	Response Distance
Single-Family Detached	< 1 unit/acre	5 miles
Mobile Homes	13.3 units/acre	3 miles
Multiple-Family	6.6 units/acre	1.5 miles
Source: Los Angeles County Fire Department, 1992		

Table 4-6 Cabrillo Elementary School Student Enrollment 1991-1995				
Grade Level	1994-95	1993-94	1992-93	1991-92
K	67	68	56	66
1	86	79	66	48
2	79	78	47	49
3	86	62	47	53
4	72	56	54	61
5	67	58	65	59
Total	457	401	335	336
Source: Santa Monica-Malibu Unified School District, 1995.				

Table 4-7 Webster Elementary School Student Enrollment 1991-1995				
Grade Level	1994-95	1993-94	1992-93	1991-92
K	65	77	57	58
1	81	87	59	71
2	88	72	71	59
3	70	74	59	46
4	72	63	46	57
5	57	46	51	57
Total	433	419	343	348
Source: Santa Monica-Malibu Unified School District, 1995.				

Table 4-8 Malibu High School Student Enrollment 1991-1995				
Grade Level	1994-95	1993-94	1992-93	1991-92
6	125	139	111	98
7	148	151	100	111
8	146	114	113	103
9	124	123	82	NA
10	96	110	NA	NA
11	111	0	NA	NA
12	0	0	NA	NA
Total	750	637	406	312
Source: Santa Monica-Malibu Unified School District, 1995. NA = Not applicable. The school did not accept high school students				

High School

Malibu High School is located at 30215 Morningview Drive, adjacent to Cabrillo Elementary and just northwest of Point Dume. The school currently serves grades 6-9 and will continue to add a grade for the next three years resulting in the service of grades 6-12 by the year 1995. The school site is approximately 25.9 acres with 20 of those acres donated for the Malibu Equestrian Center by the Malibu/Santa Monica Unified School District. An additional 22 acres declared as surplus has been given to the Santa Monica Mountains Conservancy for first right of refusal. Existing and proposed student enrollment is listed in Table 4-8.

4.3.4 Hospitals

The City of Malibu uses Santa Monica Hospital as the base hospital for emergency care for residents in Malibu. Santa Monica Hospital is located at 1250 16th Street in the City of Santa Monica -- a distance of between 4.5 and over 25 miles from Malibu, depending upon from where in Malibu the distance is measured. Travel to the hospital can take as much as 40 minutes at other than peak hours. Nearby hospitals used when Santa Monica Hospital emergency facilities are at full capacity are the University of California, Los Angeles (UCLA) Medical Center located at 10833 Le Conte Avenue in Los Angeles, and Westlake Hospital located at 4415 South Lakeview Canyon Road, Westlake Village. Helicopters are often used during peak periods to reduce travel times. The adequacy of hospital services is difficult to determine due to the different range of services offered.

4.3.5 Libraries

The Malibu Library is a branch of the Los Angeles County library system and is located at 23519 Civic Center Way. It is the only library facility serving the City of Malibu. The Malibu Library provides adult and juvenile reference services and materials; audiovisual materials, including compact discs, VHS videocassettes and

Listen for Pleasure audiocassettes; Reader's Advisory. The Malibu Library serves a population of 20,282 and 7,506 housing units in and around the City. The library is 16,530 square feet and holds over 64,000 books. The library maintains a cooperative lending relationship with County library in Los Angeles through the South State Cooperative Library System.

4.3.6 Utilities

The Southern California Edison Company (SCE) provides electricity from three primary stations and three secondary stations. The Southern California Gas Company provides natural gas. General Telephone provides telephone service. Cable television is an information and entertainment source for residents of most areas of the City. Presently, Falcon Cable services the Malibu area.

Water is supplied to the City of Malibu by County Waterworks District No. 29 from the Metropolitan Water District of Southern California (MWD). The MWD obtains its water from the State Water Project and the Colorado River. Wholesalers of this water in the Malibu/Santa Monica Mountains area are the Las Virgenes Municipal Water District and the West Basin Municipal Water District. These wholesalers distribute to three retailers which include the Los Angeles County Waterworks District No. 29, Silvas Park Mutual Water Company, and Las Virgenes Metro Water District.

Many of the City's water mains and tanks have been identified by the City and by Waterworks District No. 29 as severely undersized. District No. 29 estimates it may cost \$100,000,000. to upgrade the City's water system to current minimum standards.

There are also a number of private wells that supply water within the City. However, the utilization of wells as a source of potable water has steadily declined since 1965, when water became available through the MWD. Although the amount of water supplied by these wells is now considered to be insignificant, they are sources of inexpensive water to agricultural and other interests located away from piped water service.¹

Municipal sewer service is available only up to the far eastern end of the City. There is no municipal sewer in Malibu. There are five small, package sewage treatment plants within the city: the Latigo Bay Shores, Point Dume, Trancas Canyon, Malibu Mesa and Maison de Ville. Hughes Research Lab operates their own facilities and Pepperdine University is served by the Malibu Mesa Plant. These plants are described in detail in the Philip Williams & Associates Ltd. and Peter Warshall and Associates report of March 1992 entitled "The Malibu Wastewater Management Study."

Most wastewater is treated on-site. Improperly maintained septic systems have caused alleged health and safety problems, but, with adequate area for leaching fields or regular disposal, can be safely operated in almost all areas of the City. The

¹Incorporation of Malibu EIR, 1989

"Malibu Wastewater Management Study" recommends programs for ensuring that septic systems are properly engineered, installed and maintained. Details of the hazards associated with the systems are described in the Background Report to the Safety Element.

Solid waste disposal in Malibu is presently handled by four private hauling companies, one of which is under contract to service the Los Angeles County/Malibu Garbage Disposal District. All four haulers deliver solid waste to the Calabasas Landfill. The Calabasas Landfill is owned and operated by the Los Angeles County Sanitation District and services Malibu as one of many regional sources. The landfill is presently scheduled for closure in 2015 and as of 1990, has a remaining capacity of 12 million tons of waste yielding a projection that the landfill will accommodate an average 500,000 tons of waste each year during that period. Malibu contributes less than 10 percent of that amount. Based on the 1992 Preliminary Draft Source Reduction and Recycling Element for the City of Malibu, there were 38,750 tons of waste disposed from Malibu residents and businesses in 1991.

4.4 Goals, Objectives, Policies and Implementation Measures

C GOAL 1: SAFE, ENVIRONMENTALLY SENSITIVE AND EFFICIENT TRANSPORTATION FOR THE CITY.

C OBJECTIVE 1.1: Safe, efficient and convenient traffic system with a minimum of impact or cost.

- C Policy 1.1.1:** Where level of service at signalized intersections and roadways is below LOS C, the City shall ensure that proposed development maintains the then current LOS. Where LOS at signalized intersections and roadways is at LOS C or above, the City shall ensure that proposed development (1) does not cause a degradation of LOS greater than or equal to 2 percent in the circumstances set forth in Land Use Implementation Measure 70 and (2) does not degrade LOS below LOS C.
- C Policy 1.1.2:** The City shall utilize sound traffic engineering and enforcement principles to safely regulate traffic and improve traffic flow.
- C Policy 1.1.3:** The City shall improve traffic flow through procedural improvements.
- C Policy 1.1.4:** The City shall reduce peak time traffic.

To implement this policy the City shall:

C Implementation Measure 1: Implement the provisions of the Los Angeles County Congestion Management Program by requiring development projects to analyze and provide appropriate mitigation for traffic impacts on regional circulation facilities.

C Implementation Measure 2: Utilize appropriate operational and physical improvements such as metering, signal synchronization, pedestrian overpasses, re-signalization, provision of acceleration/deceleration lanes, and improvement of existing and creation of new left turn lanes.

C Implementation Measure 3: Cooperate with Caltrans, the Counties of Los Angeles and Ventura, the City of Los Angeles, and neighboring cities along the Ventura Freeway to improve the flow of traffic in surrounding areas which impact Malibu traffic.

C Implementation Measure 4: Ensure that proposed development mitigate traffic impacts by building or financing infrastructure improvements necessary to serve the development and by considering adoption of a traffic impact fee

C Implementation Measure 5: Undertake a study of 1996 traffic conditions in the City, including peak hour and summer traffic. The study shall include an analysis of future infrastructure capacity. The results of the study shall be presented to the City Council in Fall 1996.

C Implementation Measure 6: Promote cooperation between the City, County, Sheriff and Caltrans to limit and restrict hours of closure of PCH, Malibu Canyon Road and Kanan Dume Road lanes during repairs, construction, filming, and other activities.

C Implementation Measure 7: Work with the fire and sheriff to minimize road closures due to accidents and disasters and to facilitate traffic flow on these occasions.

C Implementation Measure 8: Adopt Transportation System Management and Transportation Demand Management programs.

C Implementation Measure 9: Work with Caltrans to reconfigure the 2-way left-turn median lane on PCH to maximize safe accessibility to structures immediately adjacent to the highway and to retain continuous emergency vehicle passage.

C Implementation Measure 10: Work with Caltrans to maintain ban trucks over 3 axles on PCH except for local deliveries.

C Implementation Measure 11: Work with Caltrans to ban trucks over 8,000 pounds on Kanan Dume Road except for local deliveries.

C Implementation Measure 12: Strictly enforce speed limits on highways and roads within the City.

C Implementation Measure 13: Configure parking in residential areas on the inland side of PCH near beach areas to avoid pedestrians crossing PCH.

C Implementation Measure 14: Consolidate curb cuts on PCH to achieve no more than one per 200 feet, wherever feasible.

C Implementation Measure 15: Facilitate the ability of residents to work at home workplace alternatives such as telecommuting centers.

Implementation Measure 16: Seek legislation to give the City a voice in management and operation of State highways within the city.

C OBJECTIVE 1.2: An effective transportation system that is multi-modal.

- C Policy 1.2.1:** The City shall promote a balanced and integrated transportation system and reduce dependence on the automobile.
- C Policy 1.2.2:** The City shall encourage the use of alternative modes of transportation.
- C Policy 1.2.3:** The City shall develop year-round local and regional public transportation.
- C Policy 1.2.4:** The City shall develop bikeways, pedestrian walkways, and equestrian paths in areas that can safely accommodate them.

To implement these policies the City shall:

C Implementation Measure 17: Monitor transportation planning in the area bounded by PCH and the 101, 405 and 10 Freeways.

C Implementation Measure 18: Seek public and private funds for programs that promote multi-modal transportation.

C Implementation Measure 19: Collaborate with the Los Angeles County Metropolitan Transportation Authority (MTA) to provide more efficient and convenient bus service to the area and connections to other MTA service.

C Implementation Measure 20: Promote a pilot program with MTA utilizing low emissions fuel in vehicles.

C Implementation Measure 21: Develop a convenient and efficient transport system for the elderly and disabled.

C Implementation Measure 22: Consider the use of Proposition "A" funds to subsidize mass-transit and para-transit services for the elderly, disabled and youth.

C Implementation Measure 23: Require commercial development to adequately accommodate pedestrian and bike traffic.

C Implementation Measure 24: Implement a bikeway and pedestrian walkway plan designed to improve visitor and resident circulation.

C OBJECTIVE 1.3: Adequate off-street parking.

- C Policy 1.3.1:** The City shall require sufficient off-street parking.

C Policy 1.3.2:

The City shall develop alternate parking opportunities for recreational uses to minimize disruption of residential neighborhoods, and to reduce air pollution.

To implement these policies the City shall:

C Implementation Measure 25: Require proposed development to provide adequate off-street parking including shared beach parking if appropriate.

C Implementation Measure 26: Cooperate with other governmental agencies to provide satellite park and ride facilities for cross-mountain and PCH bus transport to and from Malibu for commuters and recreational users.

C Implementation Measure 27: Reduce congestion on PCH by cooperating with and encouraging other governmental agencies to expand parking opportunities to serve presently under-utilized beaches in areas surrounding Malibu.

C Implementation Measure 28: Encourage provision of low-emission vehicles to provide shuttle service from parking areas to recreational areas.

C Implementation Measure 29: Permit preferential parking for non-polluting alternate fuel vehicles.

C GOAL 2: ENVIRONMENTALLY SENSITIVE, COST EFFECTIVE AND SAFE SERVICE INFRASTRUCTURE.

C OBJECTIVE 2.1: Contamination and pollution from waste disposal reduced to the maximum extent practical by the year 2000.

C Policy 2.1.1:

The City shall reduce the consumption of non-renewable resources.

C Policy 2.1.2:

The City shall protect the quality of surface and groundwater.

C Policy 2.1.3:

The City shall minimize ecological damage and public health hazards from waste disposal.

C Policy 2.1.4:

The City shall encourage utilization of innovative alternative methods of wastewater treatment.

C Policy 2.1.5:

The City shall protect residents from the hazards associated with increases in the groundwater table.

To implement these policies the City shall:

C Implementation Measure 30: Revise building and plumbing codes as necessary to incorporate innovative methods of protecting groundwater and disposing of solid waste and wastewater.

C Implementation Measure 31: Adopt standards and programs to encourage on-site wastewater recycling.

C Implementation Measure 32: Require on-site disposal systems to operate at their designed-level of efficiency.

C Implementation Measure 33: Require all current on-site waste disposal systems needing repair or renovation to meet all applicable state, county and municipal health codes.

C Implementation Measure 34: Require all sewage and wastewater created on property to be processed on site or by a neighborhood sewage treatment facility or in a cooperative system with neighboring properties.

C Implementation Measure 35: Distribute information about the proper operation and maintenance of on-site disposal systems.

C OBJECTIVE 2.2: An adequate water supply for daily and emergency use by the year 2000.

C Policy 2.2.1: The City shall ensure adequate water storage for fire fighting and other emergencies.

To implement this policy the City shall:

C Implementation Measure 36: Identify Malibu's potable, imported and ground water supplies and sources.

C Implementation Measure 37: Work with appropriate agencies such as Water District 29 and the Los Angeles County Fire Department to increase water storage at strategic locations throughout the City as required to assure a 7-day emergency water supply.

C Implementation Measure 38: Develop standards and policies that will maximize the beneficial uses of reclaimed water including methods of greywater treatment and disposal.

C GOAL 3: SCHOOLS AND EDUCATIONAL FACILITIES TO SERVE THE EDUCATIONAL NEEDS AND TO ENSURE THE CULTURAL VITALITY OF THE CITY.

C OBJECTIVE 3.1: Public schools that are physically and functionally integrated with their surrounding neighborhoods or service areas.

C Policy 3.1.1: The City shall encourage location of future school sites which are physically and functionally integrated with their surrounding neighborhoods and community.

C Policy 3.1.2: The City shall coordinate with the Santa Monica-Malibu Unified School District to share facilities and programs.

To implement this policy the City shall:

C Implementation Measure 39: Cooperate with the school and community college districts, to the extent feasible, to secure adequate funding of new school facilities.

C Implementation Measure 40: Work with the school and community college districts to coordinate school facility planning and site acquisition.

C Implementation Measure 41: Initiate cooperative agreements with SM/MUSD to share facilities and implement educational and recreational programs.

C GOAL 4: SCENIC ROADS AND ROADWAYS.

C OBJECTIVE 4.1: A system of scenic routes within the City.

C Policy 4.1.1: The City shall develop a system of landscaped scenic routes utilizing indigenous and native landscaping.

To implement this policy the City shall:

C Implementation Measure 42: Apply for State scenic highway status for roadways in Malibu.

C Implementation Measure 43: Prepare a master plan of street trees and landscaping.

C Implementation Measure 44: Work with the Chamber of Commerce and local business on a plan for the beautification of businesses and parking lots.

C Implementation Measure 45: Work with Caltrans, the California Coastal Commission, County Beaches and Harbors and other agencies to ensure that new roadway furniture (such as bus benches and trash receptacles) harmonize with the natural rural environment.

C Implementation Measure 46: Prohibit off-site advertising signs.

C Implementation Measure 47: Provide adequate signs to identify scenic corridors, viewpoints and public amenities.

2.1 Introduction	2.1
2.1.1 Introduction and Purpose	2.1
2.1.2 Purpose and Scope	2.1

2.2 Safety Elements	2.2
2.2.1 Safety and Security	2.2
2.2.2 Safety and Security	2.2
2.2.3 Safety and Security	2.2
2.2.4 Safety and Security	2.2
2.2.5 Safety and Security	2.2

2.3 Safety and Security	2.3
2.3.1 Safety and Security	2.3
2.3.2 Safety and Security	2.3
2.3.3 Safety and Security	2.3
2.3.4 Safety and Security	2.3
2.3.5 Safety and Security	2.3

SAFETY ELEMENT

1. Introduction (10 marks) - This section introduces the document and outlines the purpose of the study. It also provides a brief overview of the research methodology and the structure of the report.

2. Background (10 marks) - This section provides a detailed overview of the background information related to the study, including the current state of the field and the specific research questions.

3. Methodology (10 marks) - This section describes the research methodology used in the study, including the study design, data collection methods, and data analysis techniques.

SAFETY
ELEMENT

Safety and Health Element Table of Contents

5.1	Introduction	5-1
5.1.1	Legislative Authorization	5-1
5.1.2	Purpose and Scope	5-1
5.2	Existing Conditions	5-2
5.2.1	Geology and Topography	5-2
5.2.2	Geologic Hazards	5-4
5.2.3	Climate	5-26
5.2.4	Crime	5-26
5.2.5	Fire Hazards	5-32
5.3	Goals, Objectives, Policies and Implementation Policies	5-36

5.1 Introduction

5.1.1 Legislative Authorization

California Code Section 65302(l) requires each local government to prepare and adopt a Safety Element as a component of their General Plan. This involves identifying and mapping natural hazards and the administration of zoning and subdivision regulations that account for the safety hazards. Avoiding loss of life and property can be achieved if the problem areas of a community are recognized early and if the planning and approval process undertake an orderly means of mitigating potential hazards.

California Government Code Section 65302(g) recognizes that many actions that reduce risk from such hazards as fire, storms, flooding, and landsliding also may result in the reduction of risks from earthquakes. In accordance with the statutory requirements of the code, the Safety Element must assess threats to public health and safety from, but not limited to, the following:

- Seismic hazards: ground shaking, surface rupture, and ground failure;
- Geologic hazards: slope instability, landsliding, and unstable ground;
- Flood and inundation hazards: tsunami, seiche, dam failure, and storm induced flooding;
- Wildland and urban fire hazard; and
- Other safety issues as desired by the community, or suggested in the General Plan Guidelines, including the threat of hazardous materials releases, potentially hazardous buildings, protection of critical facilities, and emergency response issues.

5.1.2 Purpose and Scope

Much of the City of Malibu remains undeveloped as a result of constraints posed by the natural environment. Early identification of these hazards can minimize the level of public exposure. With regard to faulting and seismicity, primary hazards include surface fault rupture and ground shaking, while secondary seismic hazards include tsunamis, seiche, liquefaction, lateral spreading and seismically-induced subsidence and landslide movement. Slope instability, including landslides, mud and debris flows, and soil creep, have a common occurrence in hillside areas. Expansive soils, compressible or collapsible soils, high groundwater and shoreline regression are additional geologic/geotechnical hazards which occur throughout the City. Each of these geologic/geotechnical and safety hazards is a constant threat to the property and health of residents in Malibu within and surrounding the areas where they exist.

The purpose of the Safety Element is to create a cohesive guide consisting of specific policy-oriented implementation measures. The policies and implementation measures contained in this element will provide direction and a course of possible future action for the various City departments. To achieve its purpose, the City of Malibu General Plan accounts for hazardous issues. The intention is to reduce the potential for loss of life, injuries, damage to property, and social and economic dislocation resulting from major hazards throughout the community. A detailed analysis of the physical characteristics of Malibu and a list of the source documents used in the analysis may be found in the Safety Element Background Report.

5.2 Existing Conditions

The following information summarizes background data and analysis prepared as part of the preparation of this General Plan and Safety Element. A

full and complete copy of the background studies is available for public review in the City's Planning Department offices.

5.2.1 Geology and Topography

The City of Malibu is located within the Santa Monica Mountains which are characterized by steep and rugged hillsides and valleys and canyons draining into the Pacific Ocean. Elevations within the City range from sea level to approximately 1,700 feet above sea level. Most of the developed areas along the coast lie below 100 feet with the exception of the Point Dume and Malibu Park areas which reaches an elevation of 500 feet. The hillsides and coastal mesas such as Big Rock and Las Flores have elevations ranging from 300 to 400 feet above sea level.

The City is in an area of the California coast that encompasses extremely complex geology that has resulted from the geologic uplift that formed the Santa Monica Mountains. The City is located within the northwestern corner of the Los Angeles basin, which lies at the boundary or juncture between two major geomorphic or structural provinces of southern California: the *Peninsular Ranges province*, consisting primarily of a northwest-oriented structural grain, and the *Transverse Ranges* structural province, which features a predominantly east-west-oriented structural grain.

The Los Angeles structural basin originated roughly 16 million years ago in what is designated the Miocene geologic epoch, but the Los Angeles basin area in general has been a site of continuous sedimentary deposition for at least the past 80 million years, or since the Late Cretaceous period (Yerkes et al, 1965). The sedimentary rocks underlying the Santa Monica Mountains in the Malibu area are generally highly folded and complexly faulted, making their stratigraphic interpretation very difficult for geologists (Yerkes and Campbell, 1979).

The geologic formations that are present in the Malibu area (see also Figure S-1) include a full range of engineering geologic rock types that include, in alphabetical order:

- Alluvium (creek beds)
- Diatomaceous Beds
- Cherts
- Sandstones
- Conglomerates
- Debris flow deposits
- Cemented Sandstones
- Mudstones
- Colluvium (foothill areas)
- Siltstones
- Beach and sand dune deposits
- Mixed-Rock Terrace Deposits
- Claystones
- Shales
- Various volcanic rocks

**Insert
Figure S-1**

1-2-10-10

The common geologic formation names in the Malibu area would include, in alphabetical order:

- Calabasas Formation
- Conejo Volcanics
- Coal Canyon Formation
- Llajas Formation
- Modelo Formation
- Monterey Shale
- Sespe Formation
- Topanga Canyon Formation
- Trancas Formation
- Tuna Canyon Formation
- Vaqueros Formation
- Zuma Volcanics

Other geologic names used to describe the earth materials in the Malibu area which are geologically younger than the formations listed above would include:

- Artificial Fill
- Landslides & Landslide Deposits
- Fan Deposits
- Debris Trains
- Coastal Terrace Deposits
- Stream Terrace Deposits
- Undifferentiated Surficial Deposits

The complexity of the interrelationship between all of the geologic rock types has resulted from the fault movements along the Malibu Coast fault and the myriad of subsidiary faults, mapped and as yet unmapped.

The local bedrock structure of the Santa Monica Mountains in the Malibu area north of the Malibu Coast fault zone can be modeled as an asymmetric, south-vergent, westward-plunging anticline, whose southern limb has been partially truncated by the Malibu Coast Fault Zone (Yerkes and Campbell, 1980; Dibblee, 1982). This structural style of broad anticlinal folding reflects a higher degree of mechanical competency, and propensity for brittle deformation, within the sandstone and siltstone bedrock sequence occurring north of the Malibu Coast Fault Zone; e.g., Tuna Canyon Formation, Sespe Formation, Vaqueros Formation, and Topanga Group.

South of the Malibu Coast Fault Zone, the ductile bedrock units, Trancas and Monterey Formations, contain a high percentage of shales, mudstones and diatomaceous rocks exhibiting complex folding and pervasive shearing. However, bedrock structure on both sides of the Malibu Coast Fault Zone exhibit overwhelming evidence for south-vergent compressive deformation, including north-dipping bedding parallel to axial plane shear surfaces, gently plunging fold axes trending east-west, small-scale shear and fault surfaces exhibiting top-to-the-south displacement in exploratory trenches and roadcuts, and the ubiquitous 45-to-80-degree northward dips of all fault splays within the Malibu Coast Fault Zone, including the Malibu Coast fault proper (Yerkes and Wentworth, 1965; RSA Associates, 1989, 1990; Rzonca et al, 1991).

5.2.2 Geologic Hazards

Faulting and Seismicity: The recently published foreword from "*California at Risk, Reducing Earthquake Hazards 1992-1996*" explains the State viewpoint on the importance of recognizing seismic hazards with the following:

It is government's primary duty to assure public safety. No California jurisdiction would ignore a major toxic spill threat, a big fire hazard, or any other such "clear and present danger." While the dangers posed by earthquakes are clear, many of the responsible government official do not see them as clearly present and immediately threatening. Thus it is essential to emphasize the earthquake danger to public safety and economic stability. This ever-present hazard can be reduced and emergency response strengthened.

The State of California has aggressively embarked on its goal to significantly improve earthquake safety by the year 2000. An agenda of initiatives has been established that will involve dozens of state agencies, local agencies, the private sector, and volunteer groups. The state program includes 42 initiatives in five categories:

1. Addressing the hazards associated with existing vulnerable facilities, including utility and transportation systems as well as buildings;
2. Improving the seismic resistance of new facilities;
3. Improving management of the emergency response and relief efforts;
4. Improving disaster recovery; and
5. Supporting research and public information and education.

The important initiatives that have resulted from the October 17, 1989 Loma Prieta earthquake in the San Francisco area are a clue to some of the important issues which could be important to Malibu as follows:

- Initiative 1.1: Establish Seismic Evaluation and Retrofit Building Standards.
- Initiative 1.3: Improve Safety of Older Public School Buildings.
- Initiative 1.8: Improve Safety of Homes. Improper wall bracing and anchorage can lead to condemned buildings and the number of homeless following a major quake.
- Initiative 1.9: Improve Safety of Mobile Homes.
- Initiative 1.11: Reduce Work-place Hazards. Furniture, equipment, and stock often are not secured, causing loss of function, hazards to employees, and significant damage.
- Initiative 1.16: Improve Earthquake Performance of Transportation Structures. A major effort is required to retrofit highway bridges.
- Initiative 2.2: Map Geologic Hazards.
- Initiative 3.1: Improve Emergency Communications Systems.

- **Initiative 3.6:** Improve Shelter Planning. Urban earthquake victims require shelter services for a longer period than victims of other disasters.
- **Initiative 4.1:** Implement Recovery Guidelines.

In addition to the above, a review of the Initiatives in the *"California at Risk, Reducing Earthquake Hazards 1992-1996"* also outlines numerous other state initiatives which can serve as guidelines for the City of Malibu when picking its priorities. Summaries of these important initiatives have been reproduced in the Safety Element Background Report in Appendix B, Summary Of California Seismic Safety Commission Initiatives, 1992-1996. Actual state legislation which may affect Malibu is summarized in Appendix C, Legislation: The Last Five Years.

There are numerous faults surrounding and traversing the Malibu area, including the Malibu Coast Fault, the Santa Monica Fault, the Las Flores Reverse Fault, and the Anacapa Fault. These faults are not well defined as they are not generally visible on the surface. Maps provided in the Background report to Safety Element of the General Plan delineate a 1,000-foot area on either side of all faults as areas which could be subject to seismic hazard; see, also, Figures S-2 and S-3.

The location, geometry, sense of displacement and magnitude of maximum credible earthquake (MCE) events along the following regional faults, each of which may generate strong ground shaking impacting the Malibu area, are described below.¹ Historical and predicted maximum earthquake magnitudes are given as moment rather than the historically more common Richter magnitude, since the former is generally accepted as a better estimate of the seismic energy released during an earthquake because it is calculated from the actual physical dimensions of a fault zone (Wesnousky, 1986; Joyner and Fumal, 1985).

- **San Andreas Fault:** Although it lies 81.5 miles east of the Malibu area, the southern segment of the San Andreas fault, running from Tejon Pass to Cajon Pass, is considered capable of generating a maximum 8.0 magnitude earthquake which could generate significant ground shaking in the City of Malibu. This design earthquake is supported by the historical record, including the great 1857 Fort Tejon earthquake, estimated at 7.9 magnitude, and the more recent 1992 Landers earthquake of magnitude 7.4. The San Andreas fault has strike-slip displacement, and a well-documented mean recurrence interval of approximately 130 years for great earthquakes. Recent data suggest that such large events may actually occur in temporal "clusters" separated by much larger time periods on the order of 300 to 400 years apart (Sieh, 1984; 1989).

¹ The Maximum Creditable Earthquake Event is the worst-case design earthquake magnitudes.

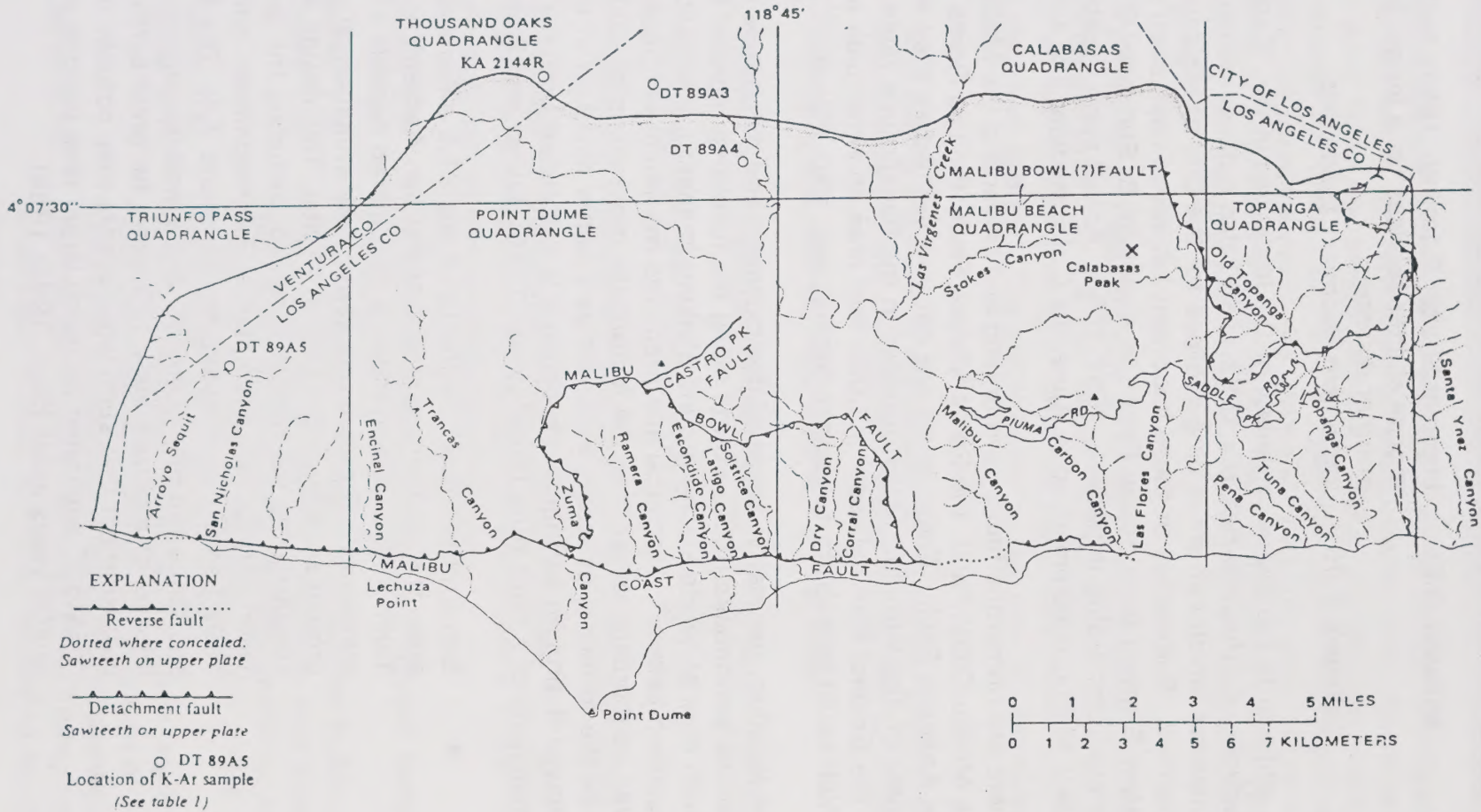
SOURCE: Hannan Geotechnical Inc., 1992

CITY OF MALIBU GENERAL PLAN

LOCAL ONSHORE FAULT MAP

(from Yerkes & Campbell, 1979)

FIGURE S-2



Insert Figure S-3



- Anacapa(Dume)-Santa Monica Fault Zone: Originally recognized on the basis of bathymetric contours in Santa Monica Bay, the Anacapa or Dume fault is a near-vertical offshore escarpment exceeding 600 meters locally, with a total length exceeding 62 miles. (Yerkes and Wentworth, 1965; Junger and Wagner, 1977) It occurs as close as 3.6 miles offshore south of Malibu at its western end, but trends northeast where it apparently merges with the offshore segment(s) of the Santa Monica Fault Zone, thus lying as close as two miles south of the Malibu Beach/Carbon Beach area. This fault is assumed responsible for generating the historic 1930 M5.2 Santa Monica earthquake, the 1973 M5.3 Point Mugu earthquake, and the 1979 and 1989 Malibu earthquakes, each of which possessed a magnitude of 5.0. (Ziony and Yerkes, 1985; Hauksson, 1990) Analyses of the first-motion seismic waves produced by these latter three earthquake events suggests that the faults which produced them were north-dipping structures, and that the earthquakes resulted from south-vergent compression of the crust (Stierman and Ellsworth, 1976; Hauksson and Saldivar, 1986; 1989). Such studies are termed "first-motion" or "focal mechanism" solutions for the earthquakes, and suggest that the Anacapa fault is a south-vergent thrust fault. Because the Anacapa fault appears to truncate the northwest-striking, strike-slip Palos Verdes Fault Zone of Peninsular Ranges affinity, the former fault is considered the present-day southern margin of the zone of thrust faults which punctuate the Transverse Ranges province.

- The Santa Monica Fault: The Santa Monica fault is interpreted as a 25 mile-long zone with physiographic up-to-the-north scarp features along its trace which imply at least Late Quaternary displacement (Weber, 1980; Crook et al, 1983). The fault is truncated eastward by the Newport-Inglewood zone, implying that the latter behaves as a tear fault and possibly a segment boundary (Dolan and Sieh, 1992). Focal mechanism solutions of small-magnitude (micro seismicity) earthquakes at the eastern end of this fault suggest that it is active (Ziony and Yerkes, 1985) as a thrust fault with a minor component of left-lateral horizontal displacement; evidence for this left-lateral component can be seen in a series of en echelon left-stepping fault scarps (Dolan and Sieh, 1992). Hauksson (190) considers the Anacapa/Santa Monica fault zone as the westernmost segment of the Elysian Park Fold and Thrust Belt, a buried or "blind thrust" fault zone forming the southernmost boundary of the Transverse Ranges, and which was responsible for the 1987 M5.9 Whittier Narrows earthquake (Hauksson and Jones, 1989). This fault has not yet been fully evaluated under the Division of Mines and Geology Fault Evaluation Program (FER), and thus does not currently possess Alquist Priolo classification as an active fault.

- Newport-Inglewood Structural Zone: Located between 18 and 31 miles east of the City of Malibu, the Newport-Inglewood zone consists of a series of en-echelon, northwest-striking right-lateral strike-slip fault segments and related fold structures defined physiographically by a series of low hills crossing the Los Angeles coastal plain. The northernmost of these, the Inglewood segment, intersects the Santa Monica fault zone in the Cheviot Hills area,

which represents the complex structural boundary between the Peninsular Ranges and Transverse Ranges. The fault has a potential to generate moment magnitude of 7.0 (Ziony and Yerkes, 1985; Topozada et al, 1988). Total onshore length of the fault is 46.5 miles; all mapped surface deformation zones along the various segments of the fault have been granted Alquist-Priolo classification (Hart, 1990). The fault produced the 1920 magnitude 4.7 Inglewood earthquake and the great 1933 magnitude 6.2 Long Beach earthquake, and the 1989 magnitude 4.6 Newport Beach earthquake. This fault zone has more seismicity associated with it than any other Late Quaternary faults in the Los Angeles basin (Hauksson, 1990).

- Palos Verdes Fault Zone: Located south of Malibu, the northernmost trace of this northwest-striking, right-reverse-slip fault occurs 7.5 miles south of the city limits, in Santa Monica Bay where it apparently intersects or merges with the Anacapa(Dume) fault discussed below. Its onshore segment forms the northwestern boundary of the Palos Verdes Hills and has significant reverse-slip component, whereas offshore it appears to be dominated by right-lateral displacement. The zone apparently displaces acoustically-transparent ocean-floor sediments in San Pedro Bay (Darrow and Fischer, 1983), interpreted to be water-saturated and thus formed recently in the Holocene period. The zone is about 50 miles long. Increases in recent seismicity along the Santa Monica Bay segment of this fault also imply Holocene displacement, although the spatial correlation of this seismicity with the geophysically-mapped offshore fault trace is not precise (Hauksson and Saldivar, 1989). Nevertheless, the fault is considered active and assumed capable of generating a maximum earthquake magnitude of 7.0; although it has not yet been granted active classification under Alquist-Priolo.
- Ventura/Pitas Point Fault: Located 19.8 miles northwest of Malibu, this fault, like the San Fernando Fault, has a thrust or reverse-slip sense of displacement. Although only 6.2 miles of onshore surface trace has been mapped, the fault extends offshore to the west for a minimum of 24.5 miles and displaces probable Holocene sediments (Greene and Kennedy, 1986). This fault has been zoned active under Alquist-Priolo, and was the probable source of a 7.1 magnitude 1812 event, a 6.8 magnitude 1925 event, a 5.0 magnitude 1930 event, and a 5.6 magnitude 1978 event, all of which had epicenters along the offshore extension of this fault in the Santa Barbara Channel. Therefore, a maximum design magnitude of 7.25 is assumed for this fault. Rates of crustal compression and tectonic uplift in the Southern California area are highest along this fault zone, based on the ages of uplifted and deformed marine terraces in the Ventura area (Lajoie et al, 1979).
- San Fernando Fault: Located 14.8 miles northeast of Malibu, at the north end of the San Fernando Valley, this is a thrust fault with similar length, sense of displacement and character to the Malibu Coast Fault Zone and other Transverse Ranges-type faults. This fault generated the 1971 San Fernando earthquake of magnitude 6.6, which caused strong ground

shaking in the Malibu area, and which was the impetus behind the Alquist-Priolo legislation. The fault is estimated to be able to yield a maximum 6.5 magnitude earthquake by Wesnousky (1986), based essentially on its mapped 10.5 miles of surface rupture during the 1971 event; however, Mualchin and Jones (1987) assume continuity with the Sierra Madre fault zone to the east, which has similar sense of displacement and a maximum design magnitude of 7.5 (Crook et al, 1987). A maximum earthquake magnitude of 7.0 is estimated herein. The entire fault zone, based on the surface rupture in 1971, is designated as active under Alquist-Priolo. On January 17, 1994, an estimated 6.7 magnitude earthquake occurred in the Northridge/Reseda area of the San Fernando Valley; preliminary analysis indicates that this earthquake was not part of the San Fernando Fault but was associated with the Oak Ridge Fault Zone or the Santa Susana Fault Zone.

- **Malibu Coast Fault Zone:** The Malibu Coast fault zone runs in an east-west orientation onshore subparallel to and along the shoreline for a linear distance of about 17 miles through the Malibu City limits, but which also extends offshore to the east and west for a total length exceeding perhaps 37.5 miles. (Junger and Wagner, 1977; Greene and Kennedy, 1986) Onshore, this fault extends from Sequit Point in the west to Carbon Beach in the east (Yerkes and Campbell, 1980; Dibblee and Ehrenspeck, 1990), although recent mapping suggests that the Las Flores thrust fault may conceivably represent an onshore extension of this fault zone, thus pushing its onshore eastern limits to the Big Rock/Las Tunas beach areas (Dibblee and Ehrenspeck, 1992).

The onshore Malibu Coast fault zone involves a broad, wide zone of faulting and shearing as much as one mile in width; the Malibu Coast fault proper is only one fault splay within this broad deformation zone, but it is the most prominent feature within the zone because it juxtaposes two crustal blocks of extremely different character on either side of its length (Durrell, 1954; Schoellhamer and Yerkes, 1961; Yerkes and Wentworth, 1965). To the north, a basement terrain of granite and related igneous rocks, intruded into older metasedimentary rocks termed the Santa Monica Slate, is overlain by a thick sequence of sedimentary rocks ranging in age from Late Cretaceous to Recent; to the south of the Malibu Coast fault proper, a basement terrain of high-pressure metamorphic rocks termed the Catalina Schist is overlain unconformably by a sequence of sedimentary rocks no older than Miocene, including the distinctive Monterey Formation, which is locally highly diatomaceous (Yerkes and Campbell, 1979). This latter crustal block south of the Malibu Coast fault is often termed a "Continental Borderland" terrain (Yerkes et al, 1965; Legg, 1992), because the Catalina Schist basement terrain underlies most of the offshore zone of southern California, which is conventionally known as the Continental Borderland.

The Malibu Coast Fault Zone (MCFZ) has not been officially designated as an active fault zone by the State of California and no Special Studies Zones

have been delineated along any part of the fault zone under the Alquist-Priolo Act of 1971. However, evidence for Holocene activity (movement in the last 11,000 years) has been established in several locations along individual fault splays within the fault zone. Due to such evidence, several fault splays within the onshore portion of the fault zone are identified as active in the Seismic Element of the County of Los Angeles (Leighton and Associates; 1990). With reference to inferred active fault splays in Malibu, the Los Angeles County Seismic Safety Element map contains a note which states:

"A primary objective of this map is to increase public awareness of fault rupture hazards recognized by the state-mandated Alquist-Priolo Special Studies Zone Act (APSSZ). Additional faults inferred to be active are included on the map because there is published information or scientific opinion by staffs of authoritative agencies that indicate there is a reason to consider them active. Their inclusion is not intended to prohibit development, but to insure that proposed projects are supported by detailed geologic and seismic investigations that will provide the most accurate obtainable data on the presence or absence of a hazards and identify necessary mitigative measures."

In general, the City of Malibu has adopted of Los Angeles County Seismic Safety Element map as discussed above and regards the Malibu Coast Fault Zone as active; however, it is recognized that individual splays within the fault zone may not necessarily be classified as active based upon site-specific geologic and seismic investigations.

Table 5-1 lists the large historic earthquakes recorded in Southern California. This list includes activity on all faults in Southern California, any of which might, during a major event, precipitate activity in Malibu; see, also, Figure S-4.

Liquefaction and Subsidence - Liquefaction is a process by which water-saturated sediment suddenly loses strength, which commonly accompanies strong ground motions caused by earthquakes. During an extended period of ground shaking or dynamic loading, porewater pressures increase and the ground is temporarily altered from a solid to a liquid state. Liquefaction is most likely to occur in unconsolidated, sandy sediments which are water-saturated within less than 30 feet of the ground surface (Tinsley et al., 1985).

Few areas of significant liquefaction susceptibility exist in the City of Malibu. These few areas are located along the beaches and in the flood plains of the major streams, such as Malibu Creek. Liquefaction susceptibility as used for this study is a qualitative measure of the a fraction, or percent, of the area considered likely to be underlain by deposits susceptible to liquefy *if strong shaking occurs*. The susceptibility value is determined as the product of three important factors:

- (1) the probability of finding cohesionless sediment in the area considered;

(2) the probability that the cohesionless sediment, when saturated, would be susceptible to liquefaction;

(3) the probability that the cohesionless sediment would be saturated.

The detailed information to determine these factors is only available for Los Angeles, San Diego and San Francisco. Because the USGS study of the Los Angeles region missed the Malibu area, susceptibility values based upon the values obtained nearby, at Santa Monica and Oxnard, were extrapolated into the City of Malibu.

Page No. 5-14
This page left intentionally blank.

**Table 5-1
Large Historic Earthquakes Recorded
in Southern California**

Date	Magnitude	Fault
Jan. 9, 1857	8.3 + *	San Andreas Fault Zone
July 21, 1952	7.7	White Wolf Fault
Nov. 4, 1927	7.5	Undetermined fault off of Point Arguello
June 28, 1992	7.3	Landers (San Andreas Fault Zone)
May 19, 1940	7.0	Imperial (San Jacinto Fault Zone)
Dec. 8, 1812	7.0*	San Andreas Fault Zone
April 21, 1918	6.9	Claremont Fault (San Jacinto Fault Zone)
June 28, 1992	6.8	Big Bear (San Andreas Fault Zone)
Jan. 17, 1994	6.7	Oak Ridge or Santa Susana Fault Zone
Dec. 25, 1899	6.6*	Claremont Fault (San Jacinto Fault Zone)
Oct. 21, 1942	6.5	Coyote Creek (San Jacinto Fault Zone)
Oct. 15, 1979	6.5	Imperial (San Jacinto Fault Zone)
April 9, 1968	6.5	Coyote Creek (San Jacinto Fault Zone)
Feb. 9, 1971	6.4	San Fernando-Sunland Fault
April 10, 1947	6.4	Manix Fault in Mojave Desert
Mar. 19, 1953	6.4	Coyote Creek (San Jacinto Fault Zone)
Mar. 10, 1933	6.3	Newport-Inglewood Fault Zone
June 29, 1825	6.3	Undetermined fault in the Santa Barbara Channel
Dec. 4, 1948	6.0	Mission Creek
Apr. 4, 1893	6.0*	San Fernando-Santa Susana Fault
May 15, 1919	6.0	Glen Ivy (San Jacinto Fault Zone)
Oct. 23, 1916	6.0*	Tejon Pass Area (San Andreas t Zone, suspected)
Oct. 1, 1987	5.9	Elysian Park Fault
July 1, 1941	5.9	Undetermined Fault in the Santa Barbara Channel

* Estimated magnitude

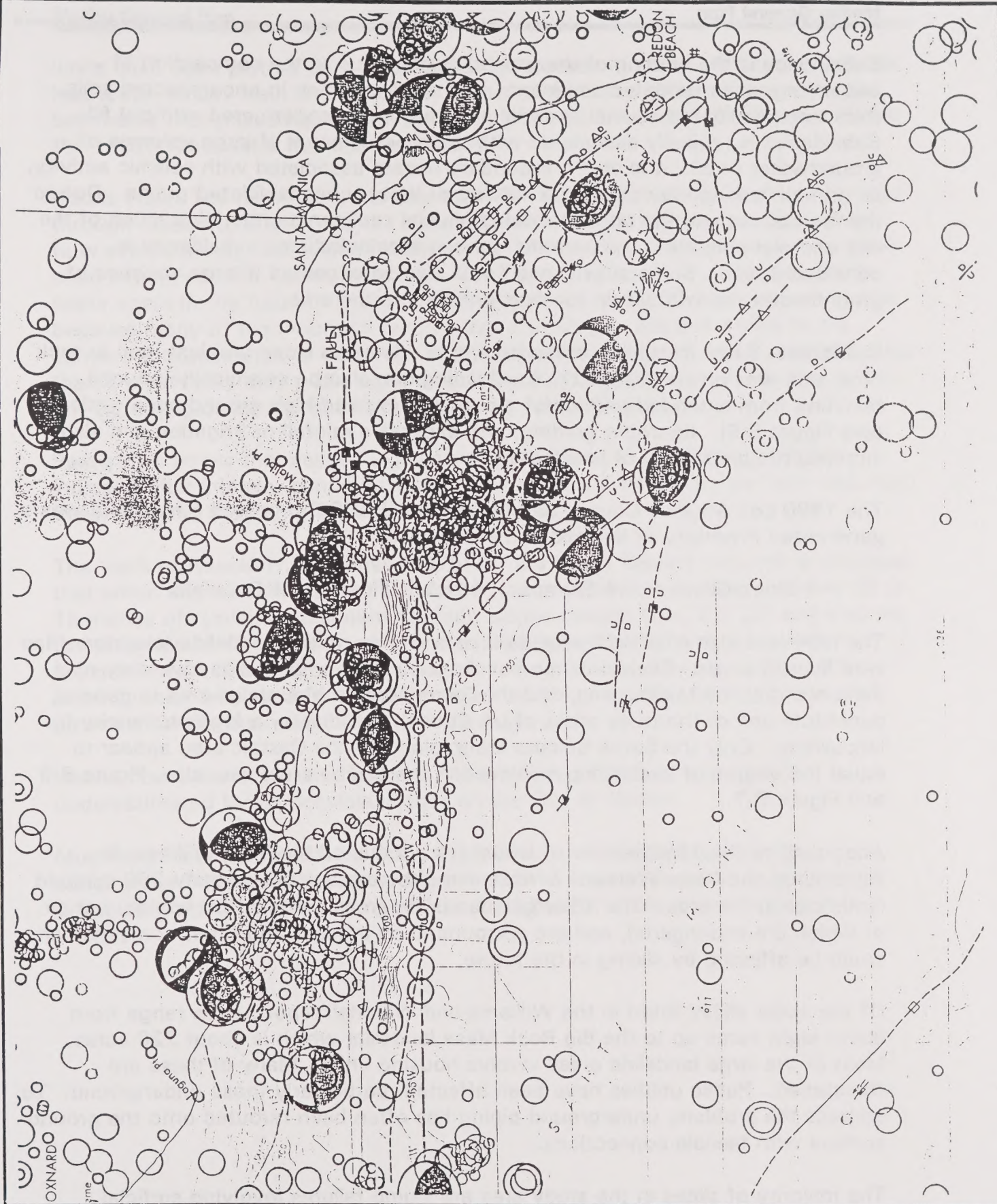
Source: Parsons Environmental Services and Harland Bartholomew & Associates (1994)

Table 24
 Laboratory Results and Findings
 - Laboratory Findings -

Test	Result	Reference Range
Complete Blood Count (CBC)	12.5 g/dL	12.0 - 16.0 g/dL
Hemoglobin (Hb)	12.5 g/dL	12.0 - 16.0 g/dL
Hematocrit (Hct)	37.5 %	37.0 - 47.0 %
Mean Corpuscular Volume (MCV)	100 fL	80 - 100 fL
Red Blood Cell Count (RBC)	4.0 x 10 ¹² /L	4.0 - 5.5 x 10 ¹² /L
White Blood Cell Count (WBC)	10.0 x 10 ⁹ /L	4.0 - 11.0 x 10 ⁹ /L
Platelet Count	250 x 10 ⁹ /L	150 - 400 x 10 ⁹ /L
Differential WBC Count		
Neutrophils	70 %	40 - 70 %
Lymphocytes	20 %	20 - 40 %
Monocytes	5 %	2 - 10 %
Eosinophils	2 %	1 - 5 %
Basophils	3 %	0 - 2 %
Urinalysis		
Glucose	Positive	Negative
Protein	Trace	Negative
Bilirubin	Negative	Negative
Urobilinogen	0.5 mg/dL	0.0 - 1.0 mg/dL
Specific Gravity	1.020	1.010 - 1.030
Microscopic Examination		
Red Blood Cells	10-15 per field	0-5 per field
White Blood Cells	5-10 per field	0-5 per field
Platelets	10-15 per field	0-5 per field
Crystals	None	None
Bacteria	None	None
Fungi	None	None
Parasites	None	None
Stool Examination		
Occult Blood	Positive	Negative
Stool Culture	Normal	Normal
Stool Ova and Parasites	None	None
Stool pH	7.5	6.5 - 7.5
Stool Consistency	Normal	Normal
Stool Color	Normal	Normal
Stool Odor	Normal	Normal
Stool Weight	150 g	100 - 200 g
Stool pH	7.5	6.5 - 7.5
Stool Consistency	Normal	Normal
Stool Color	Normal	Normal
Stool Odor	Normal	Normal
Stool Weight	150 g	100 - 200 g

Reference Range: Normal

Interpretation: The laboratory findings are consistent with a diagnosis of Iron Deficiency Anemia. The patient's hemoglobin and hematocrit are low, and the mean corpuscular volume (MCV) is low. The differential white blood cell count shows a normal distribution. The urinalysis and stool examination are normal.



SOURCE: Hannan Geotechnical Inc., 1992

CITY OF MALIBU GENERAL PLAN

FIGURE S-4
LOCAL EARTHQUAKE EPICENTER MAP
(from Greene & Kennedy, 1986)

Subsidence is the settling of the ground surface due to the compaction of underlying unconsolidated sediment. It is most common in uncompacted soils, thick unconsolidated alluvial material and improperly-constructed artificial fill. Subsidence is typically associated with the rapid removal of large volumes of groundwater or oil. It is also a secondary hazard associated with seismic activity, as groundshaking may cause the settling of loose, unconsolidated grains. Due to the fault zones and the unconsolidated alluvial sediments underlying much of the city and planning area, the potential for seismically-induced subsidence is considered high. Some subsidence could also be expected if large volumes of groundwater are withdrawn for developments in the area.

Landslides: Slope instability or landsliding is related to slope gradient, soil or rock type, and erosion susceptibility. Landsliding can also be seismically-induced, resulting from extended periods of groundshaking and high ground accelerations (see Figure S-5). Improper grading, and excessive rainfall or irrigation can also increase the probability of landsliding.

The 1990 Los Angeles County Safety Element (LACSE) prepared a map that was a generalized inventory of landslides that included:

◆ Block Glides ◆ Slumps ◆ Debris Flows ◆ Rockfalls

The minimum size of an individual landslide shown on the Landslide Inventory Map was five (5) acres. Review of the Los Angeles County Landslide Inventory map indicates that the Malibu area, and the Santa Monica Mountains area in general, constitute one of the three areas of LA County that display a high propensity for landsliding. Only the Santa Susana Mountains and the Castaic area appear to equal the degree of landsliding displayed in the Malibu area; see, also, Figure S-6 and Figure S-7.

According to the 1992 review of landslides conducted by Philip Williams & Associates and Peter Warshall & Associates there are approximately 250 mapped landslides in the area. The 15 largest landslide areas contain 350 homes, not all of which are endangered, and are surrounded by at least 285 other homes which could be affected by sliding in the future.

Of the major slides listed in the Williams and Warshall report, sizes range from about eight acres up to the Big Rock Mesa landslide which is about 220 acres. Most of the large landslide areas involve housing units. Many of these are threatened. Public utilities have been affected, particularly those underground. To address the problem, underground piping has often been rerouted onto the ground surface with flexible connections.

The majority of slides in the study area are slump failures involving surficial deposits and weathered and faulted bedrock formational material. Of the numerous slides mapped by Weber and Wills as active in 1983, most were slump failures and 16 were reactivated during the winters of 1978-1980. The landslide

limits have been plotted on a 1000-scale Geohazards Maps of Malibu available for inspection at City Hall, and the better known slides have been labeled with their commonly recognized name from the geologic literature and the listing provided in the 1992 Wastewater Management Study.

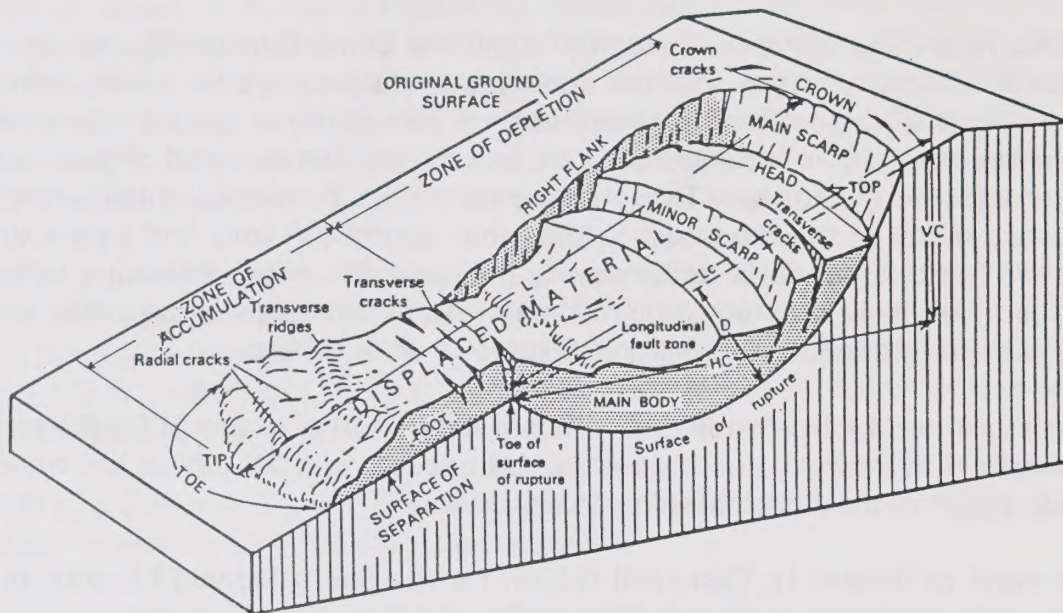
Debris Flow: The many canyons that drain the Santa Monica Mountains and cross through Malibu to empty into the ocean, provide avenues for future debris/mud flow events during wet winters and intense rain storms. Debris flow events have been experienced in Topanga Canyon, Las Flores Canyon, and others, and will occur again in the future. These phenomenon are potentially deadly to the public because many of the mountain failures that contribute soils and debris to the canyon bottoms tends to occur during the early AM hours following intense rainfall that is most likely during the night time. The public tends to be inside and asleep, not expecting catastrophic hillside failures to affect them.

Past storm tracks that caused significant debris flows in the 1982-83 storms, indicates that intense, continuous rainfall exceeding 0.25 inches per hour can, and does, occur in the Santa Monica Mountains.

The work of Russell H. Campbell (1975) for the Santa Monica Mountains indicates that when intense rain storms follow after the rainy season has experienced 10 to 15 inches of rainfall (antecedent rainfall), slopes steeper than 2:1 (26 degrees) up to steepness of 45 degrees, are prone to slippage and failure of the surficial several feet of slope. When there are numerous failures that take place within a short span of time, and that flow into main drainage courses, then there is the potential for downstream debris flow damage.

Debris flow potential from the Santa Monica Mountains has been greatly underestimated for its possible impact on the City of Malibu.

Mudflows have a potential for occurring wherever land development has constructed fill slopes that are steeper than 2:1. If such slopes are above other occupied properties, there is a potential for failure of these slopes during wet winters.



NOMENCLATURE

MAIN SCARP—A steep surface on the undisturbed ground around the periphery of the slide, caused by the movement of slide material away from undisturbed ground. The projection of the scarp surface under the displaced material becomes the surface of rupture.

MINOR SCARP—A steep surface on the displaced material produced by differential movements within the sliding mass.

HEAD—The upper parts of the slide material along the contact between the displaced material and the main scarp.

TOP—The highest point of contact between the displaced material and the main scarp.

TOE OF SURFACE OF RUPTURE—The intersection (sometimes buried) between the lower part of the surface of rupture and the original ground surface.

TOE—The margin of displaced material most distant from the main scarp.

TIP—The point on the toe most distant from the top of the slide.

FOOT—That portion of the displaced material that lies downslope from the toe of the surface of rupture.

MAIN BODY—That part of the displaced material that overlies the surface of rupture between the main scarp and toe of the surface of rupture.

FLANK—The side of the landslide.

CROWN—The material that is still in place, practically undisplaced and adjacent to the highest parts of the main scarp.

ORIGINAL GROUND SURFACE—The slope that existed before the movement which is being considered took place. If this is the surface of an older landslide, that fact should be stated.

LEFT AND RIGHT—Compass directions are preferable in describing a slide, but if right and left are used they refer to the slide as viewed from the crown.

SURFACE OF SEPARATION—The surface separating displaced material from stable material but not known to have been a surface on which failure occurred.

DISPLACED MATERIAL—The material that has moved away from its original position on the slope. It may be in a deformed or undeformed state.

ZONE OF DEPLETION—The area within which the displaced material lies below the original ground surface.

ZONE OF ACCUMULATION—The area within which the displaced material lies above the original ground surface.

SOURCE:

CITY OF MALIBU GENERAL PLAN

FIGURE S-5

GENERAL LANDSLIDE FEATURES
AND NOMENCLATURE

(Varnes, 1978)

SOURCE: Hannan Geotechnical Inc., 1992



BEDROCK LANDSLIDES

MAP SYMBOL



SIZE

5 - 100 ACRES

5 - 100 ACRES

GREATER THAN
100 ACRES

GREATER THAN
100 ACRES

EXPLANATION

DEFINITE

PROBABLE

DEFINITE

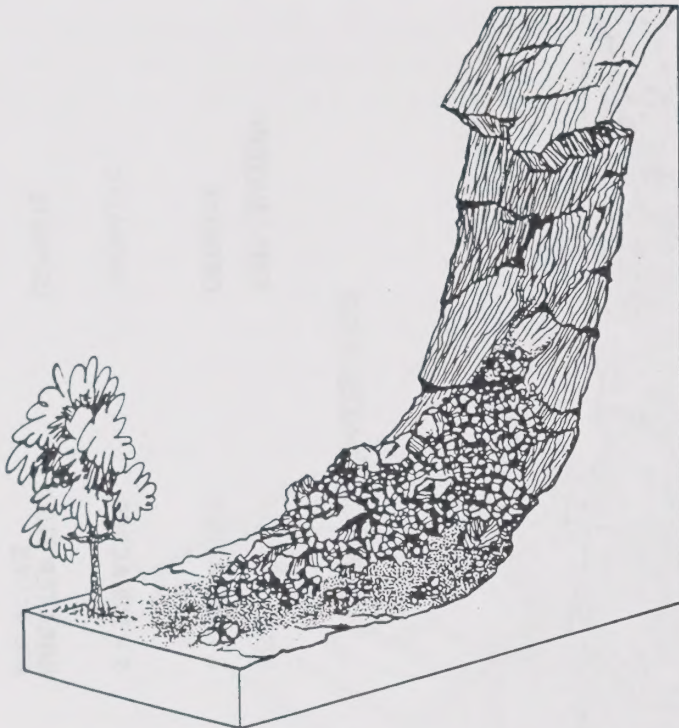
PROBABLE

CITY OF MALIBU GENERAL PLAN

FIGURE S-6

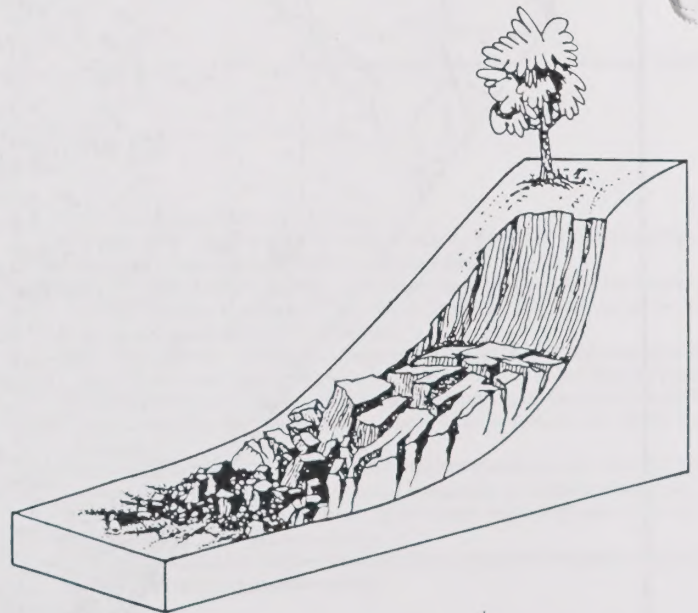
GENERAL LANDSLIDE
MAP OF MALIBU AREA

(from LA County)



—Fall—masses of rock and (or) other material that have moved downslope primarily by falling or bouncing through the air.

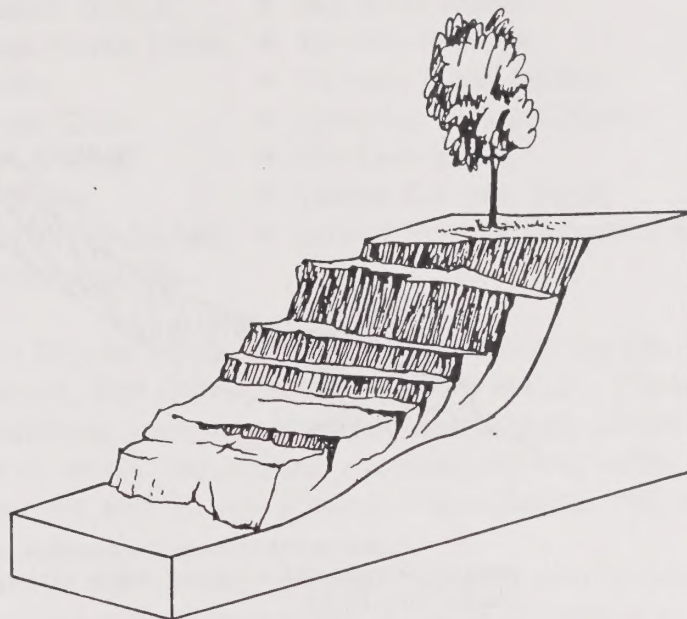
—Slide—incoherent or broken masses of rock and (or) other material that have moved downslope by sliding on a surface that underlies the deposit.



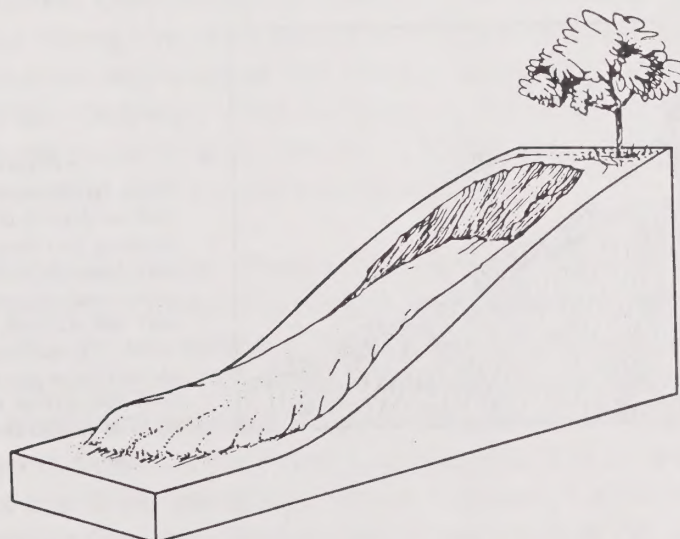
SOURCE: Harland Bartholomew & Assoc., 1992

CITY OF MALIBU GENERAL PLAN

FIGURE S-7
LANDSLIDE TYPES - FALLS & SLIDES
(Nilsen and others, 1979)



—Slump—coherent or intact masses or rock and (or) other material that have moved downslope by rotational slip on surfaces that underlie as well as penetrate the landslide deposit.

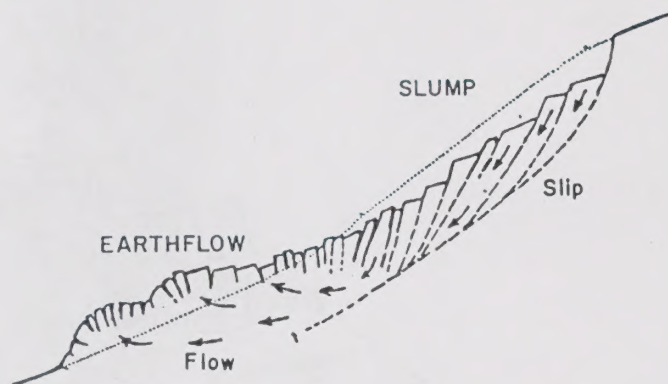


—Flow—masses of soil and other colluvial material that have moved downslope in a manner similar to the movement of a viscous fluid.

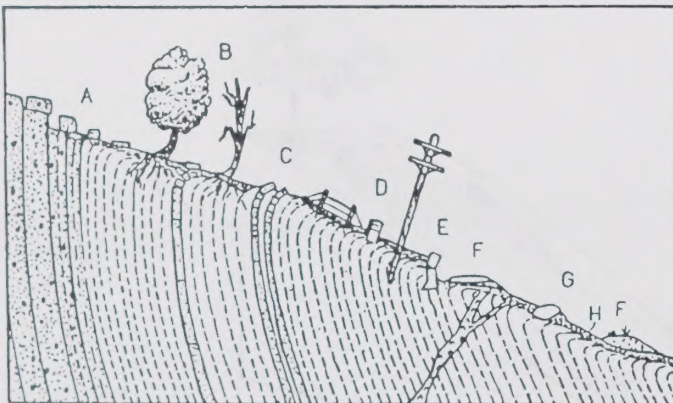
SOURCE: Hannan Geotechnical Inc., 1992

CITY OF MALIBU GENERAL PLAN

FIGURE S-8
LANDSLIDE TYPES - SLUMPS & FLOWS
(Nilsen and others, 1979)



—Cross section of a complex landslide showing movement by slumping at the top and flowing at the bottom (from Sharpe, 1938, fig. 8).



—Diagram showing creep and its effects (Sharpe, 1938, fig.2). (A) Moved joint blocks; (B) trees with curved trunks concave upslope (a criterion to be used with caution); (C) downslope bending and drag of bedded rock or weathered veins, also present beneath soil elsewhere on the slope; (D) displaced posts, poles, and monuments; (E) broken or displaced retaining walls and foundations; (F) roads and railroads moved out of alignment; (G) turf rolled downslope from creeping boulders; (H) stone-line at approximate base of creeping soil. A and C represent rock-creep; all other features shown are due to soil-creep. Similar effects may be produced by some types of landslides.

SOURCE: Hannan Geotechnical Inc., 1992

CITY OF MALIBU GENERAL PLAN

FIGURE S-9
LANDSLIDE TYPES - COMPLEX & CREEP
(Nilsen and others, 1979)

The generally recognized landslide areas in Malibu include (listed from east to west):

- Las Tunas Beach Slides;
- Eagle Pass-Las Flores Slide;
- Calle Del Barco;
- Carbon Canyon Slide;
- Puerco Beach Slides;
- Latigo Shore Slide;
- Malibu Cove Colony Slides;
- LaChusa Highlands Slide.
- Big Rock Mesa;
- Rambla Pacifico;
- Carbon Mesa Slides;
- Amarillo Beach Slides;
- RV Park Slide;
- Latigo Canyon Slide;
- Lower Encinal Canyon Slides;

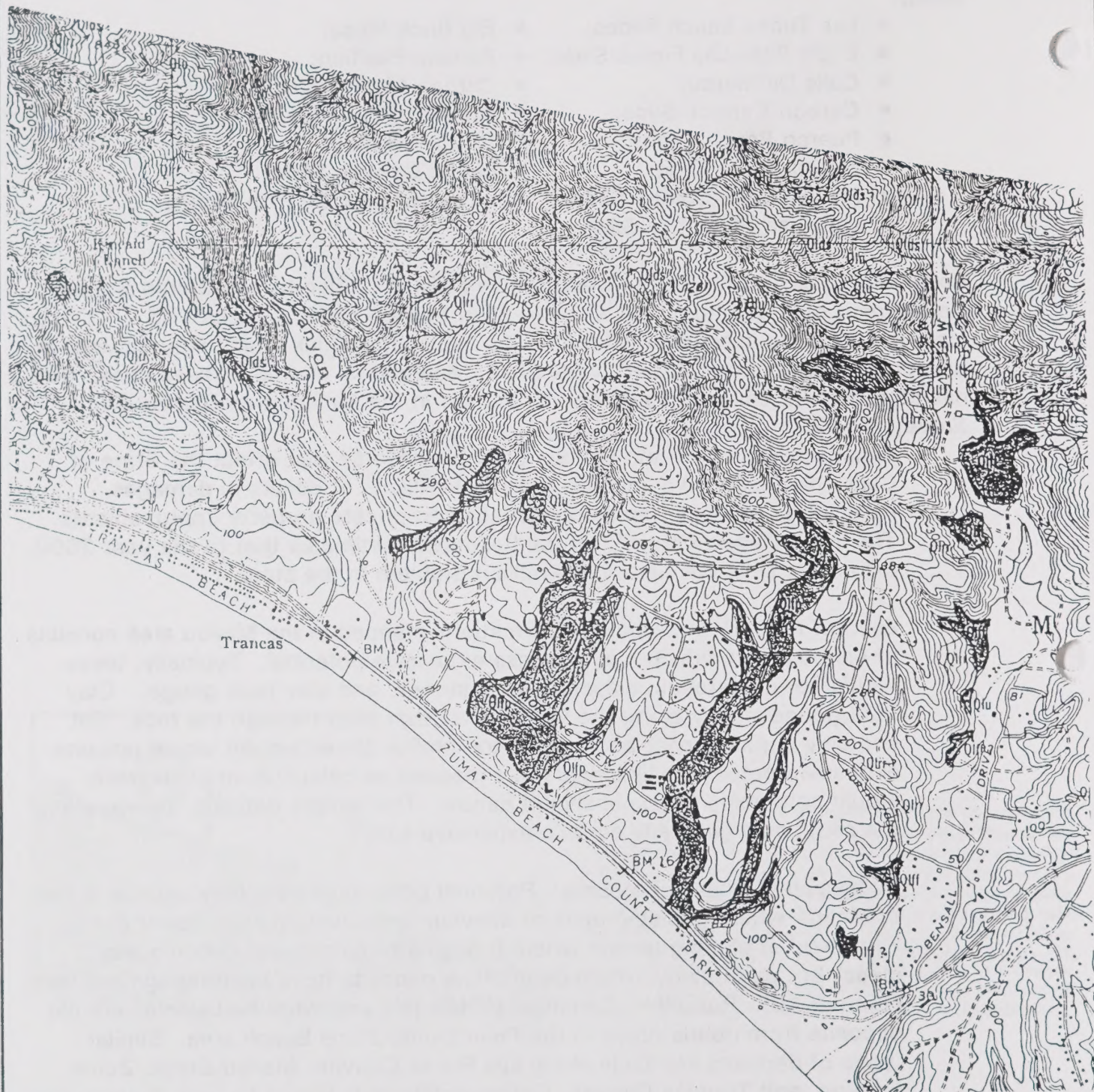
Soils: Soil types in the City of Malibu have been classified by the United States Department of Agriculture, Soil Conservation Service (SCS). These SCS classifications are associated with identified soil capabilities which may be used in planning for agricultural, urban, watershed, recreational and wilderness uses. SCS has identified 22 soil series and 45 soil phases in the Malibu area (*Malibu Soil Survey, 1967*).²

Expansive Soils: Of the various geologic hazards that affect the State of California, expansive soils have caused millions of dollars in damages, particularly to single family residences and private property improvements. The State Department of Natural Resources estimates that to the year 2000, expansive soils will be a \$150 million problem in the state.

Each of the different geologic formations mapped in the Malibu area consists of various units which may possess expansive potential. Typically, these would be: mudstones, claystones, siltstones, and clay fault gouge. Clay fault gouge is clay along the fault planes that slice through the rock. Silt and clay deposits near and around the Malibu Creek lagoon would possess expansion potential. Geologic units mapped as colluvium or slopewash, would commonly be expansive in nature. The terrace deposits shown along the coast also generally contain expansive soils.

Collapsible/Compressible Soils: Potential collapsible soils may exist in areas of Malibu where geologic units of alluvium or colluvium are present at the lower end of sloping terrain where it begins to flatten and become less steep, but particularly where debris flow deposits have been recognized (see Figure S-10). Russell H. Campbell (1980) mapped what he believes are old deposits from debris flows in the Point Dume-Zuma Beach area. Similar types of deposits are likely along Las Flores Canyon, Malibu Creek, Zuma Canyon, and Trancas Canyon. Compressible soils would be very likely in the Malibu Lagoon area, along Malibu Creek, Dume Canyon, and Trancas Canyon. Undetected, development on these type of soils may become distressed to collapse or consolidation of the foundation soils.

² Soil series are soils that are grouped together because they have a similar set of soil profile characteristics. The soil phase is a division of the soil series in which the soils are grouped together by common surface and substrata characteristics. Important characteristics used to determine soil phase are surface texture, slope and quantity of stones.



SOURCE: Hannan Geotechnical Inc., 1992

CITY OF MALIBU GENERAL PLAN
FIGURE S-10
LOCATION OF POSSIBLE COLLAPSIBLE SOILS
POINT DUME AREA
(from Campbell, 1980)

Coastal Hazards: Because of the age of the community (1920's, 1930's, to present), there are a wide range of buildings and coastal protective devices present along the Malibu coast. It has generally been observed by local geologists and engineers that during the major storms, construction that is most severely impacted is generally older construction.

In all situations, the potential exposure of a property is also a direct function of the setback of the structure from the ocean, the beach, and the cliff or bluff. Adequately setback construction provides the best protection.

Older bluff top properties with reduced bluff top setbacks, become more exposed to the risks of bluff failure and landsliding due to coastal erosion and earthquake ground shaking.

Some areas of the Malibu coastal bluffs are retreating variably because of either the neglect, or special attention, given to surface drainage control. Rapid coastal bluff, or sea cliff top, retreat can occur when surface runoff is not controlled by collection and proper disposal. Damage to properties can be seen where concentrated surface runoff has generated surficial failures of the bluff, or where erosion has quickened the advance of gullies and ravines that have been cut into the bluff face and bluff top.

There still continues to be widespread debate among coastal experts and engineers regarding the possible adverse affect on beach widths relative to coastal protection. There is also wide disagreement about what types of coastal protection are best suited to a backshore. Economics of the property owner, or entity responsible for the protective device no doubt play a role in the type of coastal protection that is ultimately constructed.

Cooperative efforts to armour (protect) stretches of beach where protective devices may be hit, or miss, seem to provide the most appropriate methods to protect all the properties involved. Apparently, attempts by the County of Los Angeles in the past to coordinate homeowners has been largely unsuccessful.

There will be a continuing threat to beach structures from wood and floating debris that become battering rams when introduced to the surf during storms and coastal erosion events. As the building of decks, patios, housing, and other improvements become more sophisticated and permitted, the percentage of damages due to floating debris should be reduced.

Tsunamis and Seiches: Tsunamis, seismic sea waves, can be expected rarely from distant sources, but may be generated immediately offshore of Malibu by surface ground rupture of the faulting just offshore, or by the occurrence of submarine landslides immediately offshore. Displacement of the sea floor could generate a local wave and would include wave runup to elevations 12 feet above Mean Lower Low Water of the Pacific Ocean in this area. The runup heights for the Malibu coast in general are between five and seven feet for the 100-year zone and between eight and 12 feet for the 500-year zone. The higher runups occur in the eastern part of Malibu because of the amplification effects related to the Santa Monica Bay resonant oscillations. (See, also, Figures S-11 to S-15 and the Safety Background Report for a more detailed discussion.)

Most of the coastal dwellings and low lying coastal areas can expect to be damaged some time in the future by an earthquake generated tsunami. Damage due to flooding in the Malibu Civic Center area can be expected. The most vulnerable objects would be people on the beaches, houses or other buildings constructed on or near the beach, and bridges over the streams near the beach, such as along the Pacific Coast Highway at Malibu Creek and Corral Creek. People could be swept away by the waves and drowned; buildings and bridges could be undermined and collapse or carried away by the currents; buildings and other structures could be battered by debris carried by the currents.

Seiche, resonant oscillations in semi-enclosed water bodies such as Santa Monica Bay, may be triggered by moderate or larger local submarine earthquakes, and sometimes by large, more distant, regional earthquakes. Seiching was recorded at Santa Monica following moderate ($M_w=5.0-5.2$) earthquakes under Santa Monica Bay in 1930, 1979, and 1989. The maximum height of these long period waves was about two feet. If such oscillations occurred during storm conditions or unusually high tides, damaging coastal inundation could result. The duration of these oscillations may be several hours.

5.2.3 Climate

The City of Malibu is located within the South Coast Air Basin. The regional air flow is controlled mainly by four synoptic large scale features, one of which occurs just prior to the winter rainy season and is commonly referred to as Santa Ana winds. Santa Anas are hot, dry, desert winds usually of relatively high velocity and are associated with low humidity. The extremely low humidity and high temperature produce an extreme fire hazard during late summer and fall.

5.2.4 Crime

A crime report for the area is completed by the County Sheriff's Department monthly and submitted to the City Manager's office. Since Malibu is primarily a residential community, the main enforcement problems are burglary, traffic and tourist-related crimes. Areas of noticeable crime impact within the City are pocket beaches along the coastline that are not patrolled regularly. With residential development occurring in the canyon areas, the physical distance from the Sheriff's stations makes it more difficult for patrols to respond to calls in these northern reaches. Additionally, the increase of commercial activity and development along Pacific Coast Highway, together with development in adjacent communities, has caused a concomitant increase in traffic accidents along Pacific Coast Highway.

**Insert
Figure S-11**

**Insert
Figure S-12**

**Insert
Figure S-13**

Page 12 of 12

Insert
Figure S-14

Insert
Figure S-15

Page 1
Figure 3.15

Page No. 5-32
This page left intentionally blank.

Pacific Coast Highway is also the main connector road of Malibu to surrounding communities. Due to its close proximity to fault lines and floodplains, Pacific Coast Highway must have adequate security for patrolling and regulating the area in the event of a natural catastrophe.

5.2.5 Fire Hazards

The City of Malibu is served by the Los Angeles County Fire Department, as well as the California Department of Forestry, if needed. According to the California Department of Forestry and the County Fire Department, Malibu is considered to be an extreme fire hazard zone. There are seven County fire stations serving the City, including four stations located in the City. In the event of major fires, the County has "mutual aid agreements" with cities and counties throughout the state so that additional personnel and fire fighting equipment can augment the County Fire Department.

Wildland fires are inevitable and area part of the natural regeneration cycle of the native California landscape. Structure losses are not necessarily directly due to wildland fires but instead result from: (a) inappropriate siting of structures; (b) flammable ornamental landscaping; (c) surrounding structure located too close together; and (d) flammable accessory structures (such as fences, decks, arbors, etc.).

The majority of the City has experienced major brush fires in the past 10 to 30 years, the most recent fire being the Old Topanga/Malibu Fire of November 2-5, 1993. This fire began along Old Topanga Road near Calabasas and, fanned by strong Santa Ana winds, burned southerly into the City of Malibu. This fire resulted in the destruction and damage of approximately 300 homes in the City, while it burned over 18,000 acres between Malibu, Topanga and Calabasas. The most significant loss to property due to the Old Topanga/Malibu Fire was in the Las Flores, Ramblo Pacifica, Carbon Mesa and Big Rock areas of the City, although the fire stretched from Topanga Canyon/Pacific Coast Highway on the east to the Pepperdine University campus on the west.

The Old Topanga/Malibu fire was very similar to the most recent fires that have struck Malibu --- primarily destroying property and burning hillside in central Malibu, between Carbon Canyon Road and Kanan Dume Road, north of Pacific Coast Highway, and western Malibu, between Encinal Canyon Road and the City's western boundaries, north of Pacific Coast Highway. There have not been any fires in Point Dume in over 30 years.

Although these are the areas of the City where fires have most recently occurred in the past, it cannot be concluded that these areas are at greater risk than others. No single area can be determined as being more susceptible to fires than another due to the fact that the location of fires varies from year to year.

Native vegetation plays a significant role in wildland fires. Malibu is located in the Santa Monica Mountains, bordering the Pacific Ocean and is subject to massive fire hazards due to highly flammable chaparral vegetation covering thousands of acres in brushlands. Fires in these brushland areas are inevitable because of the flammability of both living and non-living brush and the variable weather conditions that exist. Approximately three fourths of the mountains in the surrounding area have burned more than once in the past 50 years.

The lack of intense development reduces the occurrence of urban fires. Malibu primarily consists of low density residential with a supportive commercial area.

The residential areas are affected by fire more than any other area in the City. Houses which are nestled among the heavily vegetated canyons are surrounded by a great deal of underbrush making this area highly vulnerable to fires. However, some preventive measures, required by County and/or City ordinances, have been taken to offset the risk factors involved;

- Elimination of wood shake roofs for new construction;
- Establishment of minimum greenbelt systems along new subdivisions;
- Improvement in existing water systems and vehicular access in a number of areas;
- Improvements made in the "Incident Command System" used by the Los Angeles County Fire Department and in the emergency communications and coordination among various fire resource agencies;
- Installation of smoke detectors in homes and sprinkler systems in commercial buildings; and
- An aggressive brush clearance program that has been undertaken in the past few years.

Construction plays a major role in fire prevention. Horizontal roofings are an important concern because they catch and hold flying firebrands (pieces of burning wood). Firebrands can endanger structures as far as a mile away.

During the autumn months Malibu is very dry and, therefore, highly susceptible to fires, even with fire retardant materials. Most fires occur under Santa Ana conditions in September to March. Large picture windows and sliding doors allow radiated heat into

buildings. Overhangs and balconies are dangerous because flames sweep against the underside of these projections of the building. While preventive construction measures reduce these problems, nonetheless the fire risks in Malibu remain significant.

Although fire is a hazard to the Malibu area, it is also a necessary element in the Santa Monica Mountains ecosystems. Classified as a chaparral habitat, many of the native evergreen plants require fire to open their seeds, as well as to create new open areas for the young plants to become established. In order to minimize the fire risk to homeowners, selective clearance of flammable vegetation is required around all structures. However, removing all vegetation surrounding a residence could result in an erosion hazard leading to landslides and slope failures. By selectively thinning the more flammable vegetation and landscaping with fire retardant plants, it is possible to minimize both fire danger and erosion problems.

Statewide, approximately 90 percent of all fires are caused by human activity with the remaining 10 percent resulting from natural activity (primarily lightning). However, in the Malibu/Santa Monica Mountains areas, about 99 percent of all fires result from human activity, particularly arson, with one percent caused by natural activity. The increased tourist population to the area in the warm summer months increases the potential for fire in the area.

5.3 Goals, Objectives, Policies and Implementation Measures

S GOAL 1: A COMMUNITY THAT IS FREE FROM ALL AVOIDABLE RISKS TO SAFETY, HEALTH AND WELFARE FROM NATURAL AND MAN-MADE HAZARDS.

S OBJECTIVE 1.1: Losses to life and property from natural and man-made hazards greatly reduced from historic levels.

- | | |
|------------------------|---|
| S Policy 1.1.1: | The City shall protect people and property from environmental hazards. |
| S Policy 1.1.2: | The City shall minimize the risk of loss from fire. |
| S Policy 1.1.3: | The City shall reduce the amount of non-essential toxic and hazardous substances. |
| S Policy 1.1.4: | The City shall promote use of alternatives to hazardous substances. |
| S Policy 1.1.5: | The City shall reduce water pollution and improve Malibu's water quality. |
| S Policy 1.1.6: | The City shall reduce air pollution and improve Malibu's air quality. |
| S Policy 1.1.7: | The City shall minimize the risks from landslides and debris flows. |

To implement these policies the City shall:

S Implementation Measure 1: Develop a master plan of fire prevention and control identifying hazards, assessing acceptable levels of cost and risk and determining protection programs.

S Implementation Measure 2: Work with other agencies to ensure effective and efficient fire suppression, prevention and rescue services.

S Implementation Measure 3: Encourage owners of swimming pools to obtain gasoline powered pumps to use in fire fighting.

S Implementation Measure 4: Establish programs and guidelines for fire-safe landscaping including buffers comprised of fire resistant vegetation between residential areas and open space areas and encourage use of fire-safe landscaping principles which emphasize plant species with low fuel volumes.

S Implementation Measure 5: Work with the Los Angeles County Fire Department to adopt a program for controlled burning of combustible vegetation, based on the recommendations of the responsible forestry and fire-protection official.

S Implementation Measure 6: Work with the Los Angeles County Fire Department to enforce code requirements for flammable brush clearance, and reduction of flammable vegetation, including both native plants and ornamental landscaping.

S Implementation Measure 7: Work with appropriate agencies to assure sufficient stored water and provide non-monetary incentives for on-site or area-wide shared storage water suitable for fire fighting equal to one gallon for each square foot of structural floor area for all new development.

S Implementation Measure 8: Work with the Los Angeles County Fire Department to establish standards for fire-fighting equipment access suitable for Malibu.

S Implementation Measure 9: Create a major streets and routes plan which includes streets available as wild-fire escape routes.

S Implementation Measure 10: Require all new and remodel structures to have Class A fire-retardant roofing.

S Implementation Measure 11: Develop guidelines and standards for all new and remodel structures to utilize fire-resistant building materials and designs, and, if feasible, to be sited to minimize fire hazards.

S Implementation Measure 12: Provide South Coast Air Quality Management District regional wind patterns maps to homeowners, architects and contractors to help them plan development siting and design that minimizes fire hazards.

S Implementation Measure 13: Work with the Los Angeles County Fire Department to provide on-site fire safety inspections of individual homes, when requested by resident or owner, and advise homeowners on ways to minimize fire hazards while maintaining slope stability and appropriate vegetation.

S Implementation Measure 14: Encourage and support arson and neighborhood watch programs.

S Implementation Measure 15: Require that all camping be in designated fire-safe camping areas.

S Implementation Measure 16: Develop a permanent, ongoing homeowner watershed area management plan to reduce fire hazards while maintaining appropriate vegetation that will stabilize the watershed and control the flow of water from it. Application of such plan in Resource Protection Areas shall be subject to review and approval for compliance with resource protection requirements.

S Implementation Measure 17: Work with water service providers to identify neighbor-hoods with inadequate flow from fire hydrants, and to upgrade deteriorated and undersized water-distribution systems.

S Implementation Measure 18: Provide guidelines and incentives for use of non-toxic building materials in new and re-model construction.

S Implementation Measure 19: Regulate the transport, storage and use of toxic and hazardous materials.

S Implementation Measure 20: Work with trash haulers and Los Angeles County Fire Department to provide for the proper collection and disposal of hazardous wastes.

S Implementation Measure 21: Work with Los Angeles County Fire Department to ensure compliance with the Hazardous Materials Disclosure Law.

S Implementation Measure 22: Establish a household hazardous waste disposal program which enables residents to bring material to a centralized collection facility for proper disposal.

S Implementation Measure 23: Inform residents about the safe handling, storage, use, disposal, and alternatives to use of hazardous materials.

S Implementation Measure 24: Seek federal, state and county cooperation and funding to identify potential historic hazardous waste disposal sites and the availability of funds for the removal of any wastes discovered.

S Implementation Measure 25: Initiate and work with other agencies to assess trends in water quality and establish water cleanliness standards including a program of enforcement.

S Implementation Measure 26: Participate in efforts to identify and eliminate sources of contamination when unhealthful conditions are discovered in creeks, lagoons, intertidal zones, estuaries and wetlands.

S Implementation Measure 27: Require that all above ground discharges and reuse of wastewater for small volume treatment plants meet tertiary treatment standards.

S Implementation Measure 28: Work with other agencies to monitor and adopt receiving water quality standards, and update the City's receiving water quality standards as more accurate information becomes available.

S Implementation Measure 29: Encourage the use of new wastewater management technologies to achieve maximum feasible reduction of pathogens from wastewater prior to release into the environment.

S Implementation Measure 30: Work with regional agencies to implement the provisions of the South Coast Air Quality Management Plan (AQMP).

S Implementation Measure 31: Promote public education and awareness of air quality.

S Implementation Measure 32: Work with other agencies to reduce local sources of air pollution such as dust, smoke, and vehicle emissions.

S Implementation Measure 33: Evaluate impacts on air quality in connection with development proposals.

S Implementation Measure 34: Encourage residents and visitors to reduce the number of vehicle miles traveled while in the City.

S Implementation Measure 35: Provide information about the benefits of native oxygen-producing plants, consistent with fire safety, in order to discourage removal.

S Implementation Measure 36: As funding becomes available, study effects of excessive ground water on surface erosion, earth movement, and groundwater "day-lighting".

S Implementation Measure 37: Work with the residents of neighborhoods effected by landslides and debris flows to develop appropriate risk abatement programs.

S Implementation Measure 38: Develop a program of water budget determinations by monitoring and recording the contributions of groundwater to local areas from uphill septic tank effluent and water reuse installations.

S OBJECTIVE 1.2: Risks to residents and businesses from development in hazardous areas are minimized.

S Policy 1.2.1: The City shall require development to provide for analyses of site safety related to potential hazards of fault rupture, earthquake ground shaking, liquefaction, and rockfalls.

- S Policy 1.2.2:** The City shall require development to provide site safety analyses related to landsliding, debris flows, expansive soils, collapsible soils, erosion/sedimentation, and groundwater affects.
- S Policy 1.2.3:** The City shall require development to provide for safety from coastal storm flooding, coastal erosion, surfacing septic effluent, and tsunامي.
- S Policy 1.2.4:** The City shall require development to be consistent with minimum Federal Emergency Management Agency (FEMA) guidelines for flood plain management.

To implement these policies the City shall:

S Implementation Measure 39: Develop and maintain a development geo-hazard database to incorporate findings from site specific and area hazard-related studies.

S Implementation Measure 40: Adopt and update as appropriate maps of extreme fire danger areas, 100-year flood plains, landslide and debris flow danger, active and potentially active faults, tsunامي, and any other hazard areas; and inform residents of those areas of risks and possible mitigation measures.

S Implementation Measure 41: Require that all new construction be designed to be earthquake resistant to maximum probable earthquakes.

S Implementation Measure 42: Apply all restrictions and investigation requirements mandated by the State under the Alquist-Priolo Special Studies Zones Act for faults classified as "active" to development on properties crossed by or adjacent to the Malibu Coast Fault.

S Implementation Measure 43: Encourage area residents to participate in National Flood Insurance Program.

S Implementation Measure 44: Design coastal development, except supporting structure, to be above the wave uprush level for storms within the past 100 years, and above the 100-year flood plain.

S Implementation Measure 45: Require that all critical use facilities (hospitals, police and fire stations) be earthquake resistant designed for the effects of a maximum credible earthquake.

S Implementation Measure 46: As soon as feasible, complete coastal morphology studies and establish shoreline construction standards.

S Implementation Measure 47: To protect slope stability, restrict grading or development related vegetation clearance where the slope exceeds 2:1, except as required for fire safety, driveways and utilities and where there is no reasonable alternative.

S Implementation Measure 48: As soon as feasible, complete a study on the effects of seawalls, groins and revetments on beach erosion.

S Implementation Measure 49: Require a coastal engineering report for all proposed revetments, seawalls, cliff retaining walls and other such construction proposed to protect existing structures to ensure that the structure is constructed utilizing the least environmentally damaging method.

S Implementation Measure 50: Require that soils, geologic and structural evaluation reports with appropriate mitigation measures be prepared by registered soils engineers, engineering geologists, and/or structural engineers and that all recommended mitigation measures be implemented.

S Implementation Measure 51: Evaluate proposed development for its impact on, and from, geologic hazards, flood and mud flow hazard, and fire hazard.

S Implementation Measure 52: Require water efficient landscaping and irrigation in identified landslide sites to minimize deep percolation in all areas uphill from identified landslides.

S Implementation Measure 53: Require that proposed coastal development exposed to ocean waters, including but not limited to potentially heavy tidal or wave action, be sited landward of state-owned tidelands and be further sited so as not to cause a potential nuisance, hazard to navigation, public safety problem, or interference with the public's right in the navigable waters.

S OBJECTIVE 1.3: An ongoing, permanent program for cooperating with other jurisdictions, agencies, and public and private organization to help meet the goals of the Safety and Health Element.

S Policy 1.3.1: The City shall strive to ensure uses within Malibu's Planning Area are consistent with the safety, health and welfare of the Malibu community.

To implement this policy the City shall:

S Implementation Measure 54: Coordinate and work with other governmental entities to develop appropriate regulations to set minimum flight levels for all aircraft, to include a prescribed distance from the shoreline.

S Implementation Measure 55: Seek cooperation and approval of the FAA to ensure that only safety and emergency uses of aircraft are allowed at altitudes below 600 feet above local ground level, except by city permit.

S Implementation Measure 56: Work with jurisdictions within the Planning Area to ensure that all public water storage facilities have an emergency power supply for their pumps, or gravity-driven water distribution systems.

S Implementation Measure 57: Work with utility providers to minimize exposure to electromagnetic fields in publicly accessible areas.

S Implementation Measure 58: Work with neighboring jurisdictions and the State to develop and expand emergency medical services.

S Implementation Measure 59: Work with the appropriate jurisdictions to ensure that highways, roads, bike paths, foot paths, and trails are free of avoidable hazards.

S Implementation Measure 60: Work with appropriate agencies to ensure that the quantity of harmful bacteria, viruses and toxic substances in all Malibu shoreline, lagoon, and stream waters are at or below safe levels established by the City, State or Federal government, whichever are more stringent.

S Implementation Measure 61: Work with other jurisdictions and agencies to ensure that risks of flooding caused by upstream development are minimized.

S Implementation Measure 62: Work with the responsible jurisdictions to ensure that all dams in the Malibu watershed areas have regular safety inspections.

S Implementation Measure 63: Notify all jurisdictions within the Planning Area and all appropriate agencies at the State level of the City's request to review all plans and programs relating to issues that may concern the health and safety of Malibu residents.

S Implementation Measure 64: Respond to all proposed development actions in the Planning Area which may endanger the health and safety of the City's residents.

S Implementation Measure 65: Work with jurisdictions within the Planning Area to ensure that all public recreational areas have adequate toilet facilities.

**S GOAL 2: A COMMUNITY PREPARED FOR EFFECTIVE RESPONSE TO EMERGENCIES,
AND RECOVERY WHEN THEY OCCUR.**

**S OBJECTIVE 2.1: A comprehensive plan for response to all levels of emergency
situations.**

- S Policy 2.1.1:** The City shall cooperate to achieve efficient and prompt response by local agencies to those emergencies which require no outside help.
- S Policy 2.1.2:** The City shall coordinate efficient utilization of emergency assistance provided by neighboring communities and county agencies under mutual-aid response.
- S Policy 2.1.3:** The City shall develop a plan to ensure that in situations of extreme emergency the community is prepared to survive until outside assistance arrives.

To implement these policies the City shall:

S Implementation Measure 66: Develop an Emergency Response Plan and update as needed.

S Implementation Measure 67: Support and encourage sufficient local staffing and equipment-levels for police, fire fighting, lifeguard, paramedic and other medical, public works and utility organizations to assure timely and well coordinated response to alarm calls and to meet most emergencies.

S Implementation Measure 68: Develop response time criteria and monitor law enforcement programs.

S Implementation Measure 69: Work with other agencies to assure access to specialized trauma care within 20 minutes of notification.

S Implementation Measure 70: Create a procedure for promptly initiating an Emergency Operations Center to coordinate all emergency-response actions from the onset of any emergency which requires mutual aid from neighboring communities.

S Implementation Measure 71: Create a procedure for promptly establishing effective intelligence-gathering and command, control and communications functions in all emergencies requiring aid from outside the community.

S Implementation Measure 72: Establish a core of trained and organized volunteers from the community capable of providing intelligence, communications, medical and logistic support to the professional health and safety organizations in emergency situations.

S Implementation Measure 73: Work with other agencies to close public beaches to recreational use in the event of a pollution emergency.

S Implementation Measure 74: Work with other agencies to close public recreation areas to recreational use in the event of wildfire in the Planning Area.

S Implementation Measure 75: Continue to improve the area-wide, volunteer-manned emergency communication system.

S Implementation Measure 76: Organize an area-wide, volunteer-manned emergency medical care system including medical-center locations, patient transport vehicles and drivers, and triage policies and training.

S Implementation Measure 77: Organize and equip neighborhood, volunteer-manned emergency response organizations, including trained first-aid volunteers, and locally stockpiled supplies.

S Implementation Measure 78: Develop and maintain an inventory of heavy equipment and trained operators which would be available in major emergency situations.

S Implementation Measure 79: Conduct emergency-response drills on a regular basis.

S Implementation Measure 80: Identify emergency helicopter landing sites at strategic points throughout the City in the City's Emergency Response Plan. Provide data on these sites to be included in the Los Angeles County Emergency Response Plan.

S Implementation Measure 81: Participate in a tsunami warning system.

S Implementation Measure 82: Work with the Red Cross, other private agencies, and local, state and federal government agencies on disaster-preparedness education and training.

S Implementation Measure 83: Map all existing and planned safety and health related facilities in Malibu.

S OBJECTIVE 2.2: A comprehensive plan for recovery from all levels of emergency situations is developed and updated as needed.

S Policy 2.2.1: The City shall facilitate timely recovery from all disasters.

To implement this policy the City shall:

S Implementation Measure 84: Create a disaster-recovery team to develop recovery plans and establish/maintain liaison with all agencies involved in recovery from a disaster in Malibu.

S Implementation Measure 85: Maintain an inventory of potential Government and private sources of aid to recovery from major disasters, and assist the community in obtaining this aid.

S Implementation Measure 86: Facilitate short term recovery aid provided by local charitable and other groups and individuals, during recovery from major disasters.

S Implementation Measure 87: Support and encourage residents and local businesses to carry adequate insurance or maintain adequate resources to meet most emergencies.

S Implementation Measure 88: Work with law enforcement agencies to develop techniques to improve local access during times of emergency.

S GOAL 3: A COMMUNITY THAT IS EXCEPTIONALLY SAFE AND HEALTHY.

S OBJECTIVE 3.1: Actively promote health and safety so that residents are exceptionally safe and healthy by national standards.

S Policy 3.1.1: The City shall facilitate programs so that people feel safe, and crime and violence are minimized.

S Policy 3.1.2: The City shall facilitate and/or encourage programs which will improve access to health-enhancement and health-care facilities for people of all ages.

S Policy 3.1.3: The City shall assess risks to the health and safety of citizens and visitors, and inform the public about those risks and ways to avoid them.

S Policy 3.1.4: The City shall encourage efforts by private organizations to enhance community health and safety.

- S Policy 3.1.5:** The City shall encourage volunteer efforts to assist in providing safety to businesses, residents and visitors.
- S Policy 3.1.6:** The City shall provide effective and efficient law enforcement protection services.
- S Policy 3.1.7:** The City shall discourage the hiring of day workers from sites which might endanger the public health and safety.

To implement these policies the City shall:

S Implementation Measure 89: Maintain a comprehensive program for strong police presence to deter criminal activity.

S Implementation Measure 90: Maintain a comprehensive program to protect the Community from substance abuse.

S Implementation Measure 91: Provide law-enforcement personnel to aggressively patrol streets and recreational areas to prevent driving under the influence of alcohol and drugs.

S Implementation Measure 92: Periodically evaluate Los Angeles County Sheriff's services and service criteria to ensure that the City continues to receive adequate law enforcement services.

S Implementation Measure 93: Work with private charitable groups to continue to provide safe and healthy locations for the hiring of day-workers in Malibu.

S Implementation Measure 94: Prohibit smoking in government public buildings and require at a minimum that non-smoking areas be provided in all indoor privately owned facilities used by the public.

S Implementation Measure 95: Require that employers provide toilet facilities for all temporary and permanent workers.

S Implementation Measure 96: Encourage all service stations and public buildings to provide toilet facilities to the public.

S Implementation Measure 97: Support development of paratransit services offered by public and/or private agencies and service providers to improve access to health care facilities.

S Implementation Measure 98: Work with health care providers to assure timely access to medical care for all segments in the community.

S Implementation Measure 99: Encourage efforts to provide in-home health care for the elderly and handicapped residents of Malibu.

S Implementation Measure 100: Encourage and promote facilities for hospice care and long term in-patient medical treatment and care for the community's elderly and seriously ill.

S Implementation Measure 101: Establish community health-education and safety-education programs, to include the need to prepare well ahead of time for emergency response and recovery.

S Implementation Measure 102: Work with health care providers to promote, encourage, and facilitate provision of urgent care at a reasonable cost to residents and visitors.

S Implementation Measure 103: Establish an education and awareness program to enhance household, water, and highway safety, and fire prevention.

S Implementation Measure 104: Educate the community about risks to swimmers and surfers from ocean pollution.

S Implementation Measure 105: Facilitate regular testing of water at suitable locations along the Malibu shoreline to assure that toxic substances, bacteria, and/or virus do not put ocean recreation participants at risk.

S Implementation Measure 106: Review data on water quality collected and analyzed by other agencies and document inadequacies and inaccuracies that might impact the health of residents. Coordinate with the monitoring agencies to improve the monitoring program.

S Implementation Measure 107: Work with local physicians and environmental groups to assess risks to swimmers and surfers from ocean pollution due to storm drainage.

S Implementation Measure 108: Enact ordinances prohibiting the placing of graffiti within the City.

S Implementation Measure 109: Take swift action to cause removal of any graffiti that appears within the City including properties under the jurisdiction of other governmental agencies.

S Implementation Measure 110: Work with Sheriff's station to encourage employment of volunteer litter law enforcement offers and posting of violation warning signs.

S Implementation Measure 111: Establish a volunteer program for cleanup of litter trouble spots on Pacific Coast Highway.

S Implementation Measure 112: Develop a program to provide conveniently located trash collection receptacles and provide regularly scheduled special litter cleanup for neighborhoods suffering particularly heavy litter accumulation.

S Implementation Measure 113: Work with other agencies to develop literature to educate the public about the negative impacts of litter.

NOISE
ELEMENT

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and the role of the accounting system in providing reliable financial information.

2. It then outlines the various methods used to collect and analyze data, including the use of statistical techniques and the application of mathematical models to predict future trends.

3. The document also describes the process of identifying and quantifying risks, as well as the development of strategies to mitigate potential losses and maximize returns.

4. In addition, it discusses the importance of maintaining a strong relationship with the relevant regulatory bodies and the need to comply with all applicable laws and regulations.

5. The document also describes the process of identifying and quantifying risks, as well as the development of strategies to mitigate potential losses and maximize returns.

6. It then outlines the various methods used to collect and analyze data, including the use of statistical techniques and the application of mathematical models to predict future trends.

7. The document also describes the process of identifying and quantifying risks, as well as the development of strategies to mitigate potential losses and maximize returns.

8. In addition, it discusses the importance of maintaining a strong relationship with the relevant regulatory bodies and the need to comply with all applicable laws and regulations.

9. The document also describes the process of identifying and quantifying risks, as well as the development of strategies to mitigate potential losses and maximize returns.

10. It then outlines the various methods used to collect and analyze data, including the use of statistical techniques and the application of mathematical models to predict future trends.

Water Resources
Table of Contents

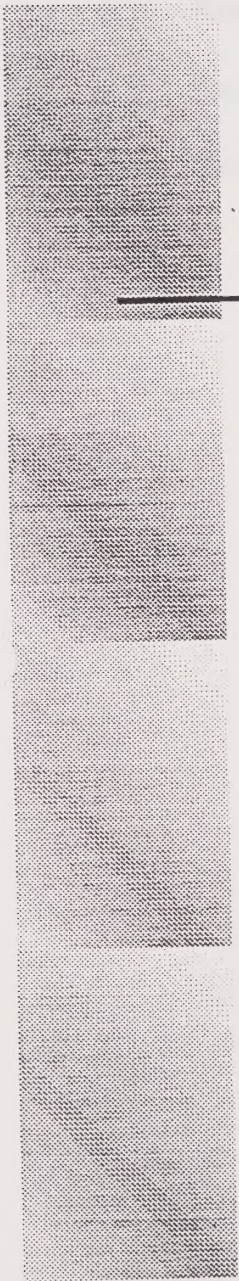
Introduction
1.1 Integrated Assessment
1.2 Planning and Design
1.3 Environmental Impacts and Technology

2.1 Policy, Plans and Regulations

2.2 Environmental Assessment

2.3 Assessment, Policy and Management Review

NOISE ELEMENT



NOISE
ELEMENT

Noise Element Table of Contents

6.1	Introduction	6-1
6.1.1	Legislative Authorization	6-1
6.1.2	Purpose and Scope	6-1
6.1.3	Related Information and Terminology	6-2
6.2	Standards, Plans and Regulations	6-4
6.3	Existing Noise Environment	6-6
6.4	Goals, Objectives, Policies and Implementation Policies	6-23

1-1	Introduction
1-2	1.1 Objectives of the Project
1-3	1.2 Scope of the Project
1-4	1.3 Organization of the Project
2-1	2.1 General Principles and Guidelines
2-2	2.2 Detailed Design and Construction
2-3	2.3 Testing and Commissioning
2-4	2.4 Safety, Health, and Environmental Protection

6.1 Introduction**6.1.1 Legislative Authorization**

The State of California has mandated that each county and city prepare a noise element as part of its general plan. Section 65302(f) of the California Government Code requires that the element shall:

identify and appraise noise problems in the community. The noise element shall recognize the guidelines established by the Office of Noise Control in the State Department of Health Services and shall analyze and quantify, to the extent practicable, as determined by the legislative body, current and projected noise levels for all of the following sources:

- *Highways and freeways;*
- *Primary arterials and major local streets;*
- *Passenger and freight on-line railroad operations and ground rapid transit systems;*
- *Commercial, general aviation, heliport, helistop, and military airport operations, aircraft overflights, jet engine test stands, and all other ground facilities and maintenance functions related to airport operation;*
- *Local industrial plants, including, but not limited to, railroad classification yards; and*
- *Other ground stationary noise sources identified by local agencies as contributing to the community noise environment.*

6.1.2 Purpose and Scope

The purpose of the Noise Element is to provide guidance for comprehensive local programs to control and abate excessive noise and to protect residents from adverse noise impacts. The element provides information on the existing and projected noise environment and includes, goals, objectives, policies and implementation programs to ensure an acceptable noise environment. The element also identifies criteria to be used by decision makers in evaluating the noise implications of proposed projects.

The typical community noise environment is comprised of a background noise level and higher noise levels, frequently transportation oriented. Because the background noise level is lower at night, the problems posed by higher noise levels are more pronounced at night.

The predominant noise source in Malibu is vehicular traffic from Pacific Coast Highway, the major canyon roads, and the local arterials. Stationary sources within the City include a wide range of recreational, commercial, and business activities.

6.1.3 Related Information and Terminology

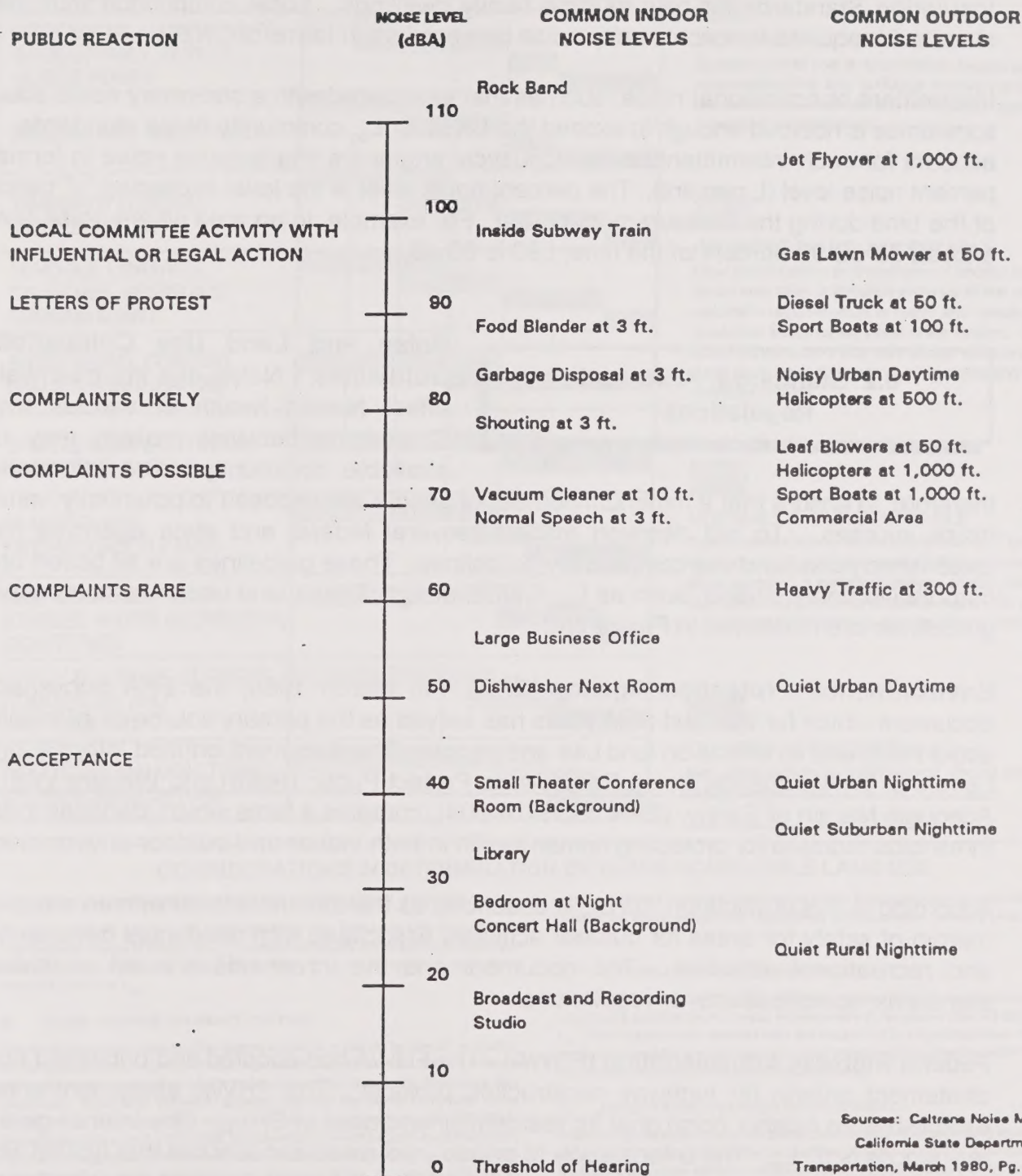
Noise is most often defined as unwanted sound. Sound levels can easily be measured, but the variability in subjective and physical response to sound requires a more detailed analysis to determine the impact on people. People judge the relative magnitude of sound sensation in subjective terms such as "loudness" or "noisiness." Physically, sound pressure magnitude is measured and quantified on a scale which indicates the sound level in units of decibels (dB). All sound pressure levels discussed in this study are referenced to the standard reference pressure of 20 microPascals.

The human hearing system is not equally sensitive to sound at all frequencies. Because of this variability, a frequency-dependent adjustment called an A-weighting has been devised so that sound may be measured in a manner similar to the way the human hearing system responds. The use of the A-weighted sound level is often indicated by using the abbreviation "dBA" for expressing the sound level. An increase in the sound level by 10 dBA is judged by most people to be approximately twice as loud as the former, whereas most people are unable to detect a change in less than 3 dBA. To acquaint the reader with sound levels produced by common noise sources, measured sound levels for various sources are provided in Figure N-1.

It is desirable to describe a noise environment with a single number representing an hour or even a whole day so that easy reference and comparison can be made. Common methods which are widely used in the United States and abroad consider the average noise level and the maximum level recorded over a period of time, referred to as the Equivalent Level (L_{eq}), the Minimum Level (L_{min}), and Maximum Level (L_{max}), respectively. L_{eq} is a single-number noise descriptor that represents the average sound level in an environment where the actual noise level varies with time, L_{min} and L_{max} are the lowest and highest noise level that occurred during that time.

In a typical outdoor environment, the noise level varies during the day according to various activities in the community. Noise that may be acceptable during the day may be unwanted sound at night; e.g., automobile traffic on a nearby street, aircraft overflight, or dog barking. Thus, additional units of measurements have been developed to evaluate the longer term characteristics of sound. The Community Noise Equivalent Level (CNEL) and the day-night level (L_{dn}), along with L_{eq} , are the measurements commonly used in California.

CNEL is a single-number noise descriptor. However, CNEL represents the average noise level over a 24-hour period and is appropriate in assessing long-term roadway noise impacts. CNEL is similar to a 24-hour L_{eq} , but with a 10 dBA penalty added to nighttime (10 p.m. to 7 a.m.) sound levels and a 5 dBA penalty added to evening sound levels (7 p.m. to 10 p.m.) before the 24-hour average is computed. These penalties are applied to account for the increased annoyance that is generally felt by a person of normal sensitivity during the evening relaxation and nighttime sleep hours.



Sources: Caltrans Noise Manual
California State Department of
Transportation, March 1980, Pg. 1-1-4
Parsons Environmental Services 1993

CITY OF MALIBU GENERAL PLAN
FIGURE N-1
COMMON NOISE LEVELS AND PUBLIC REACTIONS

CNEL is the noise metric currently specified in the State Aeronautics Code for evaluation of the noise impact of airplanes. Additionally, CNEL is specified by the State Noise Insulation Standards for new multiple family dwellings. Local compliance with these standards requires that community noise be specified in terms of CNEL.

Intermittent or occasional noise, such as that associated with a stationary noise source sometimes is not loud enough to exceed the CNEL or L_{eq} community noise standards. To account for such intermittent noise, acoustical engineers characterize noise in terms of percent noise level (L percent). The percent noise level is the level exceeded "x" percent of the time during the measurement period. For example, in an area where noise levels exceed 65 dB 90 percent of the time, L_{90} is 65 dB.

6.2 Standards, Plans and Regulations

Noise and Land Use Compatibility Guidelines - Noise has the potential to affect human health in various ways. Community decision makers may use available community noise information,

therefore, to ensure that a minimum number of people are exposed to potentially harmful noise sources. To aid decision makers, several federal and state agencies have established noise/land use compatibility guidelines. These guidelines are all based upon cumulative noise criteria, such as L_{eq} , CNEL, or L_{dn} . These land uses and compatibility guidelines are illustrated in Figure N-2.

Environmental Protection Agency (EPA) - In March 1984, the EPA published a document which for the past nine years has served as the primary source of information about noise and its effects on land use and people. The document entitled Information of Levels of Environmental Noise Requisite to Protect Public Health and Welfare With an Adequate Margin of Safety, (EPA 550/9-74-004), contains a table which identifies indoor thresholds requisite for protecting human health in both indoor and outdoor environments.

According to this publication, 55 L_{dn} is described as the threshold level with an adequate margin of safety for areas for outdoor activities associated with residential development and recreational activities. The document and the thresholds are not considered standards, specifications, or regulations.

Federal Highway Administration (FHWA) - The FHWA has adopted and published noise abatement criteria for highway construction projects. The FHWA abatement criteria establishes an exterior noise goal for residential land uses of 67 L_{eq} . The interior goal for residences is 52 L_{eq} . The criteria apply to private yard areas and assume that typical wood frame houses with open windows provide a 10 dB noise reduction and a 20 dB noise reduction with the windows closed.

LAND USE CATEGORY	COMMUNITY NOISE EXPOSURE L_{dn} OR CNEL, dB					
	55	60	65	70	75	80
RESIDENTIAL - LOW DENSITY SINGLE FAMILY, DUPLEX, MOBILE HOMES						
RESIDENTIAL - MULTIFAMILY						
TRANSIENT LODGING - MOTELS, HOTELS						
SCHOOLS, LIBRARIES, CHURCHES, HOSPITALS, NURSING HOMES						
AUDITORIUMS, CONCERT HALLS, AMPHITHEATRES						
SPORTS ARENA, OUTDOOR SPECTATOR SPORTS						
PLAYGROUNDS, NEIGHBORHOOD PARKS						
GOLF COURSES, RIDING STABLES, WATER RECREATION, CEMETERIES						
OFFICE BUILDINGS, BUSINESS COMMERCIAL AND PROFESSIONAL						
INDUSTRIAL, MANUFACTURING UTILITIES, AGRICULTURE						

LEGEND



NORMALLY ACCEPTABLE

Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.



CONDITIONALLY ACCEPTABLE

New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.



NORMALLY UNACCEPTABLE

New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.



CLEARLY UNACCEPTABLE

New construction or development should generally not be undertaken.

CONSIDERATIONS IN DETERMINATION OF NOISE-COMPATIBLE LAND USE

A. NORMALIZED NOISE EXPOSURE INFORMATION DESIRED

Where sufficient data exists, evaluate land use suitability with respect to a "normalized" value of CNEL or L_{dn} . Normalized values are obtained by adding or subtracting the constants described in Table 1 to the measured or calculated value of CNEL or L_{dn} .

B. NOISE SOURCE CHARACTERISTICS

The land use-noise compatibility recommendations should be viewed in relation to the specific source of the noise. For example, aircraft and railroad noise is normally made up of higher single noise events than auto traffic but occurs less frequently. Therefore, different sources yielding the same composite noise exposure do not necessarily create the same noise environment. The State Aeronautics Act uses 65 dB CNEL as the criterion which airports must eventually meet to protect existing residential communities from unacceptable exposure to aircraft noise. In order to facilitate the purposes of the Act, one of which is to encourage land uses compatible with the 65 dB CNEL criterion wherever possible, and in order to facilitate the ability of airports to comply with the Act,

residential uses located in Community Noise Exposure Areas greater than 65 dB should be discouraged and considered located within normally unacceptable areas.

C. SUITABLE INTERIOR ENVIRONMENTS

One objective of locating residential units relative to a known noise source is to maintain a suitable interior noise environment at no greater than 45 dB CNEL of L_{dn} . This requirement, coupled with the measured or calculated noise reduction performance of the type of structure under consideration, should govern the minimum acceptable distance to a noise source.

D. ACCEPTABLE OUTDOOR ENVIRONMENTS

Another consideration, which in some communities is an overriding factor, is the desire for an acceptable outdoor noise environment. When this is the case, more restrictive standards for land use compatibility, typically below the maximum considered "normally acceptable" for that land use category, may be appropriate.

Source: California Department of Health, Guidelines for the Preparation and Content of Noise Elements of The General Plan, February, 1976

CITY OF MALIBU GENERAL PLAN FIGURE N-2 NOISE AND LAND USE COMPATIBILITY GUIDELINES

State of California - The State of California has adopted noise standards in areas of regulation not preempted by the federal government.¹ State standards regulate noise levels of motor vehicles, freeway noise affecting classrooms, sound transmissions, occupational noise control, and airport noise. The purpose of the standards is to establish minimum noise insulation performance standards to protect persons within new hotel, motels, apartment houses, and dwellings other than detached single-family dwellings. The standards specify that interior noise levels, with windows closed, attributable to exterior sources shall not exceed an annual noise level of 45 dB CNEL in any habitable room. In addition, residential buildings or structures within a 60 dB CNEL exterior noise environment due to airport, vehicular, or industrial noise sources are required to have an acoustical analysis prepared indicating that the proposed building has been designed to limit intruding noise to the allowable 45 dB CNEL interior noise level.

In 1976, the Department of Health, State Office of Noise Control published a recommended noise/land use compatibility matrix which many jurisdictions have adopted as a standard in their general plan noise elements. This matrix indicates that residential land uses and other noise sensitive receptors generally should locate in areas where outdoor ambient noise levels do not exceed 65 to 70 dBA (CNEL or L_{dn}).

6.3 Existing Noise Environment

The City includes a wide variety of land use and development types that are noise sensitive. Noise sensitive land uses include, single and multiple family residences, schools, libraries, medical facilities, retirement/rest homes, and places of religious worship. The predominant land uses in the City are noise sensitive residential uses.

The existing measurable noise environment was documented through both a community noise survey and computer generated noise contours. The noise survey identified existing noise levels generated by various sources at specific locations within the City while the computer analysis predicted existing and future roadway noise levels.

Community Noise Survey - A community noise survey was conducted on July 16, 1992 to document the existing noise environment within the City of Malibu. Noise measurements were conducted at 10 sites between 9:28 A.M. and 3:03 P.M. The locations were representative of residential, commercial and public use areas. Noise measurement survey data forms for each location are provided in Appendix A of the Background Report to this Element. The approximate locations of the noise measurements are illustrated in Figure N-3 and the results are presented in Table 6-1. Each site was measured for 15 minutes. The quantities measured are in L_{eq} , L_{min} , and L_{max} . The noise measurement results summarized in Table 9-1 should be used as a guide or indication of noise levels throughout the community.

The land uses in the locations surveyed included predominantly noise sensitive land uses

The California Sound Transmission Control Standards are found in California Administrative Code, Title 25, Building Standards, Chapter 2.5, as adopted March 1, 1986.

such as residential neighborhoods. Commercial uses also exist at three of the measurement sites and one location contains only commercial uses. Public open space such as the Malibu Bluffs Park were also surveyed for noise levels. The noise sources in most of the locations surveyed included vehicular traffic, street maintenance, animals, helicopter and other aircraft, and lawn equipment. The noise survey recorded L_{eq} noise levels throughout the City of 74 dBA and below. Most of the noise levels in these areas are compatible with the land uses, there are however, a few areas identified on Table 6-1 in which the noise levels exceed the normally acceptable levels for the existing land uses.

Roadway Traffic Noise - The dominant noise source in Malibu is roadway traffic from Pacific Coast Highway which runs east/west throughout the City. Additional roadway traffic noise arises from some of the canyon roads including, Malibu Canyon Road and Kanan Dume Road which run north/south.

Noise Contours - The noise contours represent lines of equal noise exposure, just as the lines on a weather map indicate equal temperature or atmospheric pressure. The contours provide a visualization of estimates of sound level. Land forms and man-made structures have very complex effects on sound transmission and on noise contours. Generally, barriers between a source and receiver absorb or reflect noise resulting in a quieter environment. Where barriers or land forms do not interrupt the noise transmission path from source to receiver, the contours prove to be good estimates of the average noise level. In areas where barriers or land forms interrupt the sound transmission, the noise contours overestimate the extent to which a source intrudes into the community. The noise contour distances describe worst-case conditions because they do not account for any obstructions to the noise path, such as walls, berms, or buildings. There were 16 roadway segments that were analyzed; Table 6-2 provides the results of the analysis along Pacific Coast Highway during the summer months which are the peak traffic months.

A graphic display of the 55, 60, 65, 70 and 75 dB CNEL noise contours for the existing major roadway noise sources is provided in Figures 6-4(A-D) and 6-5(A-D). Figure 6-4(A-D) presents an overall picture and several detailed maps of the contours for annual roadway noise. Figure 6-5(A-D) presents an overall picture and several detailed maps of the contours for the summer months/peak season roadway noise along Pacific Coast Highway. The noise contours represent unmitigated conditions. Therefore, on roadways where walls, berms or structures block the noise path, the contours overestimate the noise impact.

It is not possible for a general plan noise element to analyze each roadway segment of the City for barrier noise attenuation. Therefore, where specific projects are proposed within noise impacted areas, an acoustical analysis should be completed to evaluate the noise reduction provided by any barriers to the noise path. A description of the study methodology and data sources is included in the Background Report to this Element.

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the integrity of the financial system and for the ability to detect and prevent fraud. The document also outlines the responsibilities of individuals involved in the process, including the need for transparency and accountability.

The second part of the document provides a detailed overview of the various methods used to collect and analyze data. It describes the different types of data sources, such as surveys, interviews, and focus groups, and explains how this information is used to identify trends and patterns. The document also discusses the challenges associated with data collection and analysis, such as ensuring the reliability and validity of the data.

The third part of the document focuses on the development and implementation of a comprehensive risk management strategy. It outlines the key components of a risk management framework, including the identification of risks, the assessment of their potential impact, and the implementation of controls to mitigate them. The document also discusses the importance of ongoing monitoring and review to ensure that the risk management strategy remains effective over time.

The final part of the document provides a summary of the key findings and conclusions of the study. It highlights the main points discussed in the previous sections and offers recommendations for future research and practice. The document concludes by emphasizing the need for continued collaboration and communication among all stakeholders involved in the process.

Table N-1 Table N-1: Proposed Survey Results				
Location	Survey Results (2010)			
	Type	Area	Value	Value
1. 10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road
2. 10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road
3. 10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road
4. 10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road
5. 10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road
6. 10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road
7. 10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road
8. 10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road
9. 10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road
10. 10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road	10th & Ocean Canyon Road

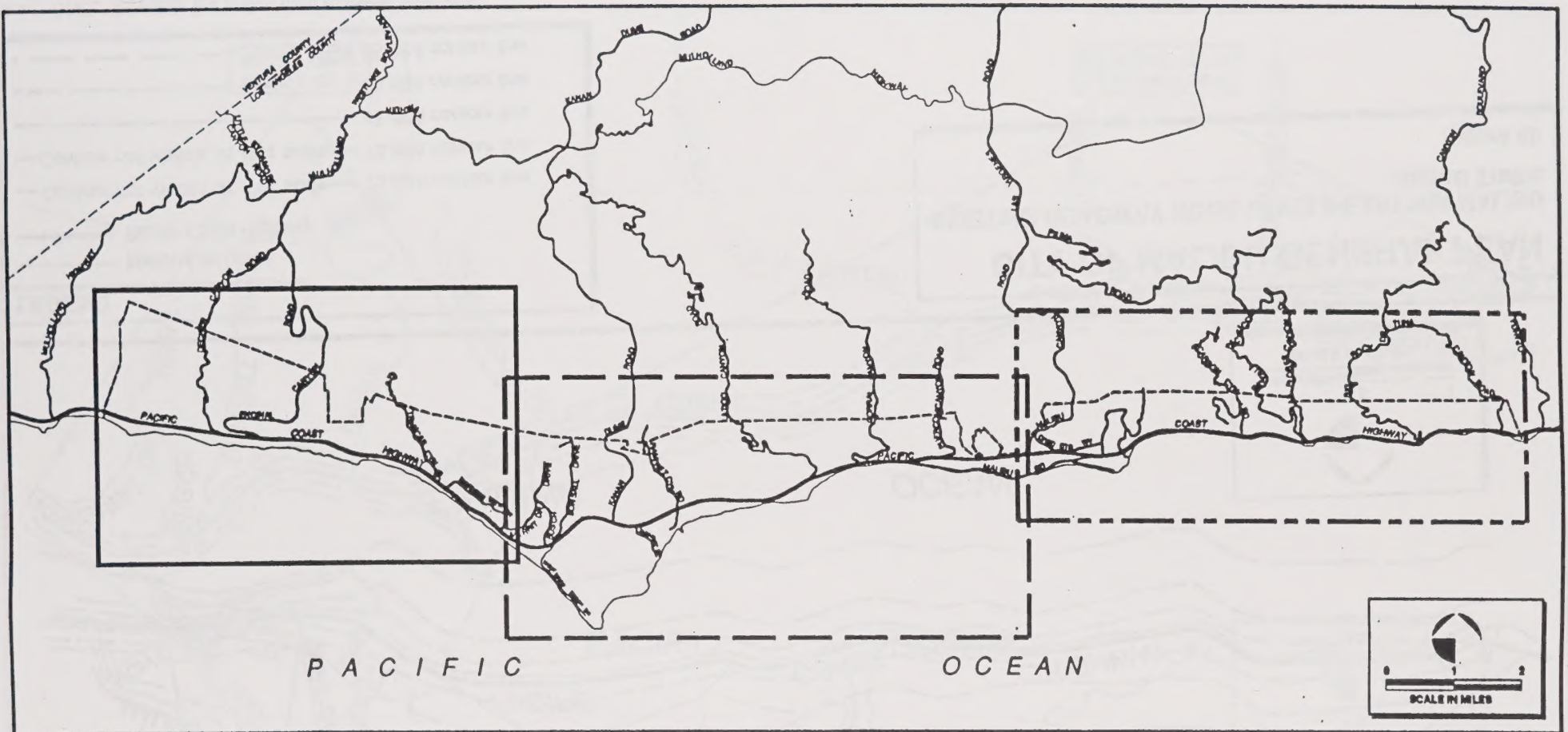
Insert
Figure N - 3

**Table 6-1:
Noise Measurement Survey Results**

Location	Noise Levels (in dBA)			
	Time	L _{eq}	L _{min}	L _{max}
1. PCH & Decker Canyon Road	1:02 p.m.	73	48	81
2. PCH & Trancas Canyon Road	12:30 p.m.	70	57	78
3. PCH between Busch & Morning View	1:36 p.m.	74	53	81
4. Dume Drive & Grayfox Street	11:54 a.m.	63	37	74
5. PCH & Zuma Mesa Road	11:28 a.m.	72	49	78
6. Malibu Country/Vantage Point	2:16 p.m.	52	36	65
7. PCH & Malibu Canyon Road	10:54 a.m.	68	51	75
8. Cross Creek/Civic Center Way	9:48 a.m.	64	48	75
9. Carbon Canyon/Carbon Mesa	9:22 a.m.	49	32	59
10. PCH/Las Flores Canyon Road	2:48 p.m.	72	51	79

Source: Harland Bartholomew & Associates, July 1992

Table 1: Summary of Data				
Overall Summary				
Detailed Data				
Year	Q1	Q2	Q3	Q4
2018	10	20	30	40
2019	15	25	35	45
2020	20	30	40	50
2021	25	35	45	55
2022	30	40	50	60
2023	35	45	55	65
2024	40	50	60	70
2025	45	55	65	75
2026	50	60	70	80
2027	55	65	75	85
2028	60	70	80	90
2029	65	75	85	95
2030	70	80	90	100



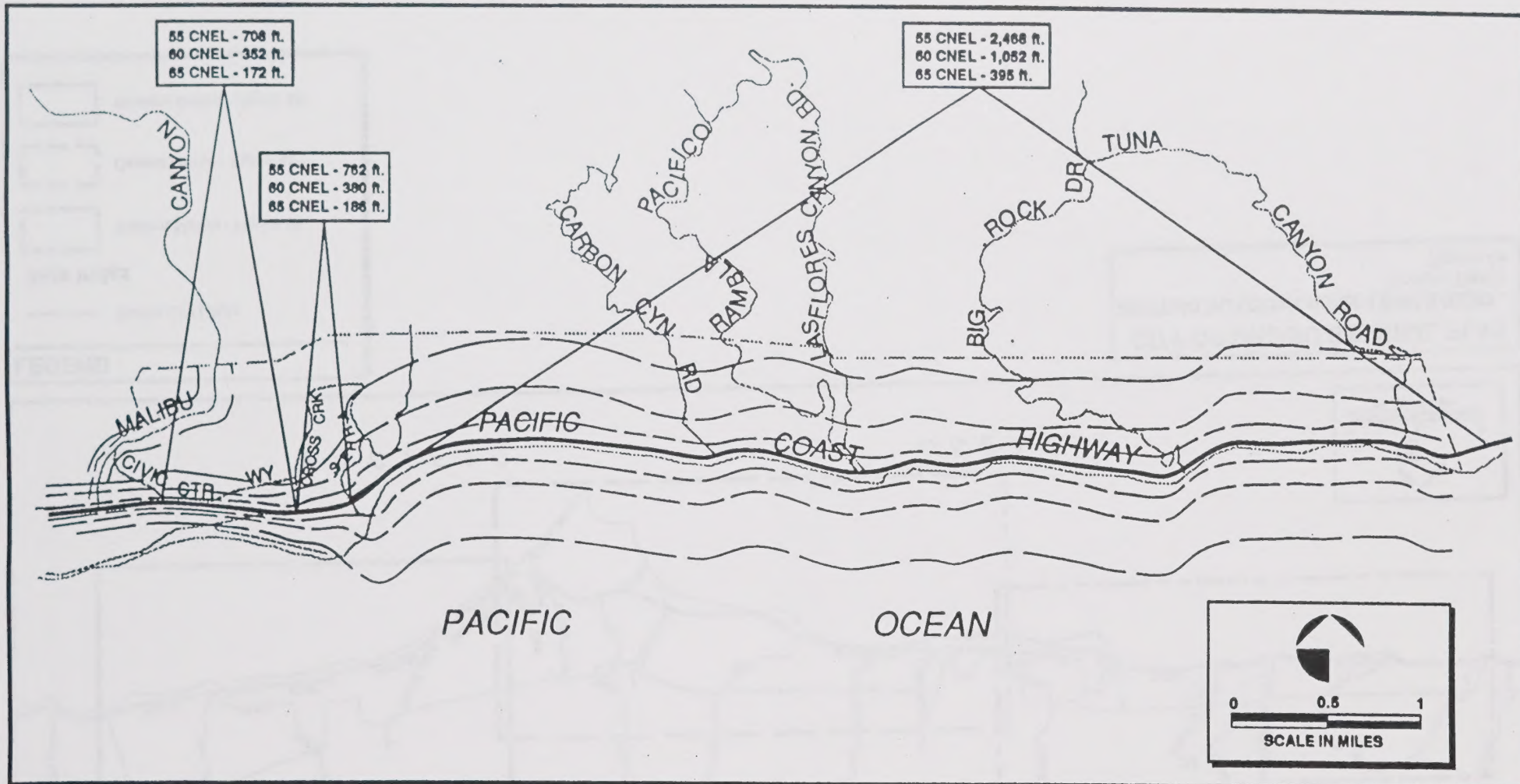
LEGEND

----- Malibu City Limits

Area Index

- Eastern Malibu - Figure 4b
- Central Malibu - Figure 4c
- Western Malibu - Figure 4d

CITY OF MALIBU GENERAL PLAN
EXISTING ROADWAY NOISE LEVELS INDEX -
Annual Traffic
Figure 4a



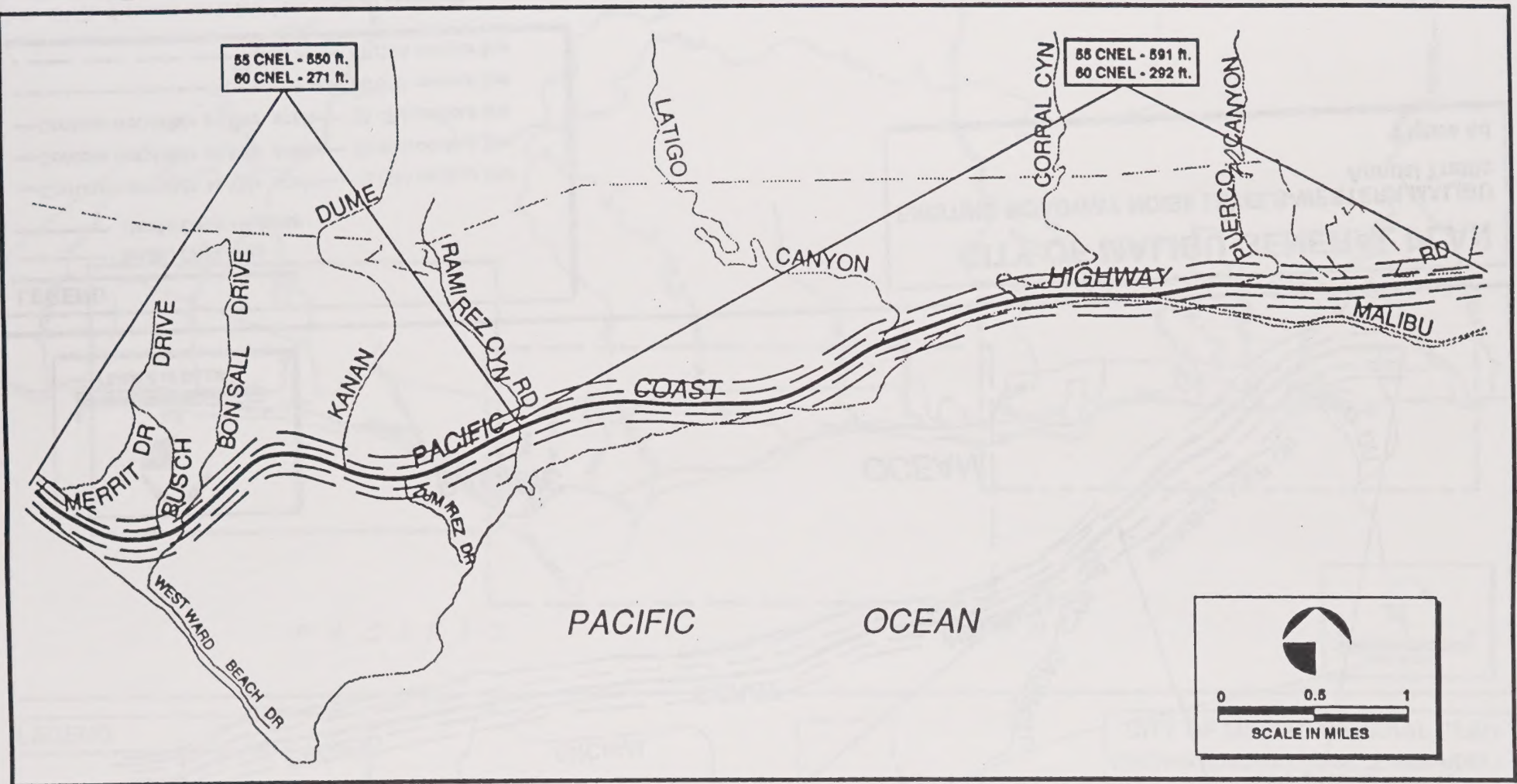
LEGEND

- Malibu City Limits
- Pacific Coast Highway
- Contour not visible at this scale — 75 dBA contour line
- Contour not visible at this scale — 70 dBA contour line
- 65 dBA contour line
- 60 dBA contour line
- - - - - 55 dBA contour line

CITY OF MALIBU GENERAL PLAN EXISTING ROADWAY NOISE LEVELS-EASTERN MALIBU Annual Traffic

Figure 4b

Note: CNEL distances are in feet from roadway centerline.



LEGEND

- Malibu City Limits
- Pacific Coast Highway
- Contour not visible at this scale — 75 dBA contour line
- Contour not visible at this scale — 70 dBA contour line
- Contour not visible at this scale — 65 dBA contour line
- 60 dBA contour line
- 55 dBA contour line

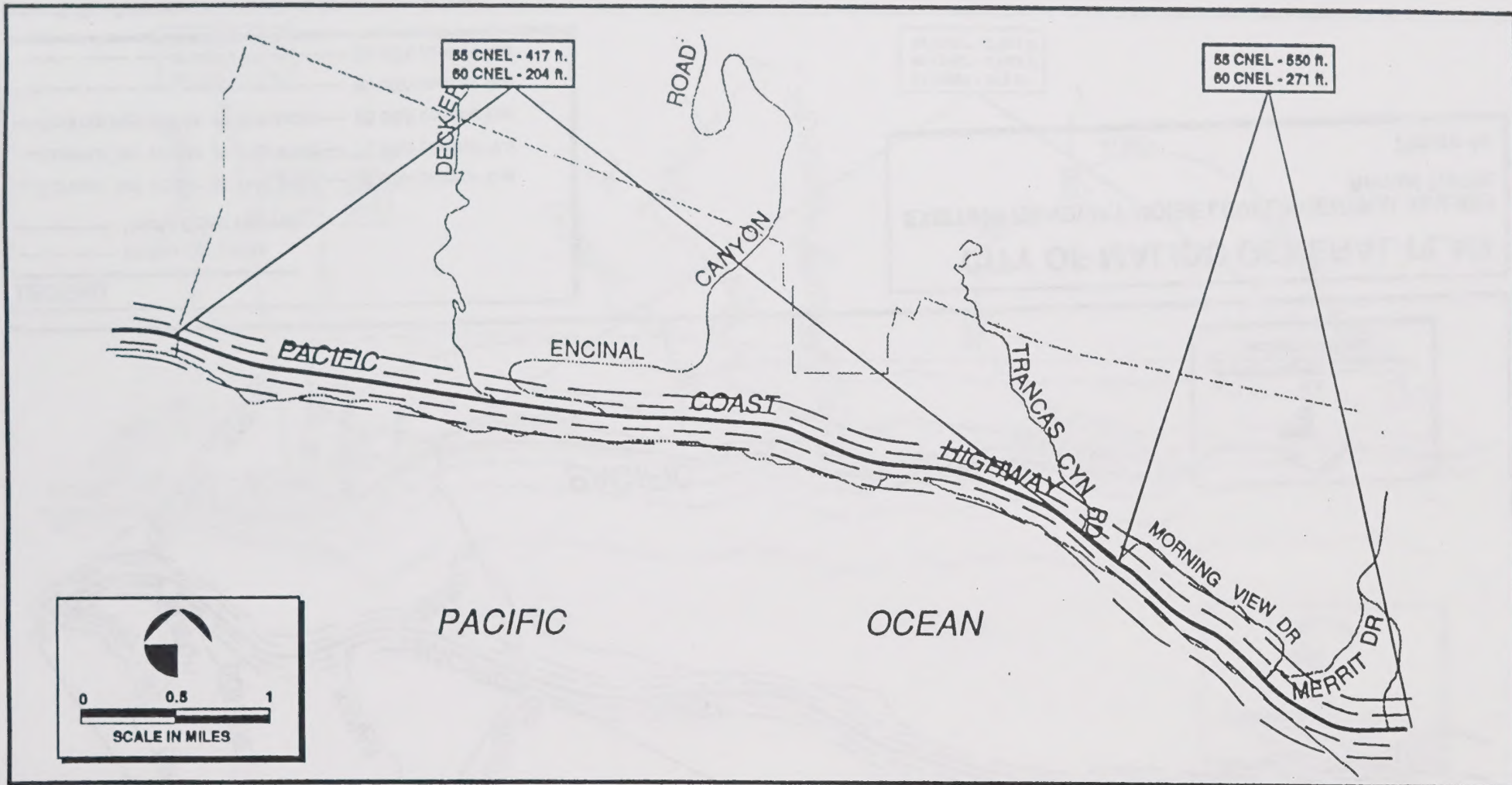
Note: CNEL distances are in feet from roadway centerline.

CITY OF MALIBU GENERAL PLAN

EXISTING ROADWAY NOISE LEVELS-CENTRAL MALIBU

Annual Traffic

Figure 4c



LEGEND

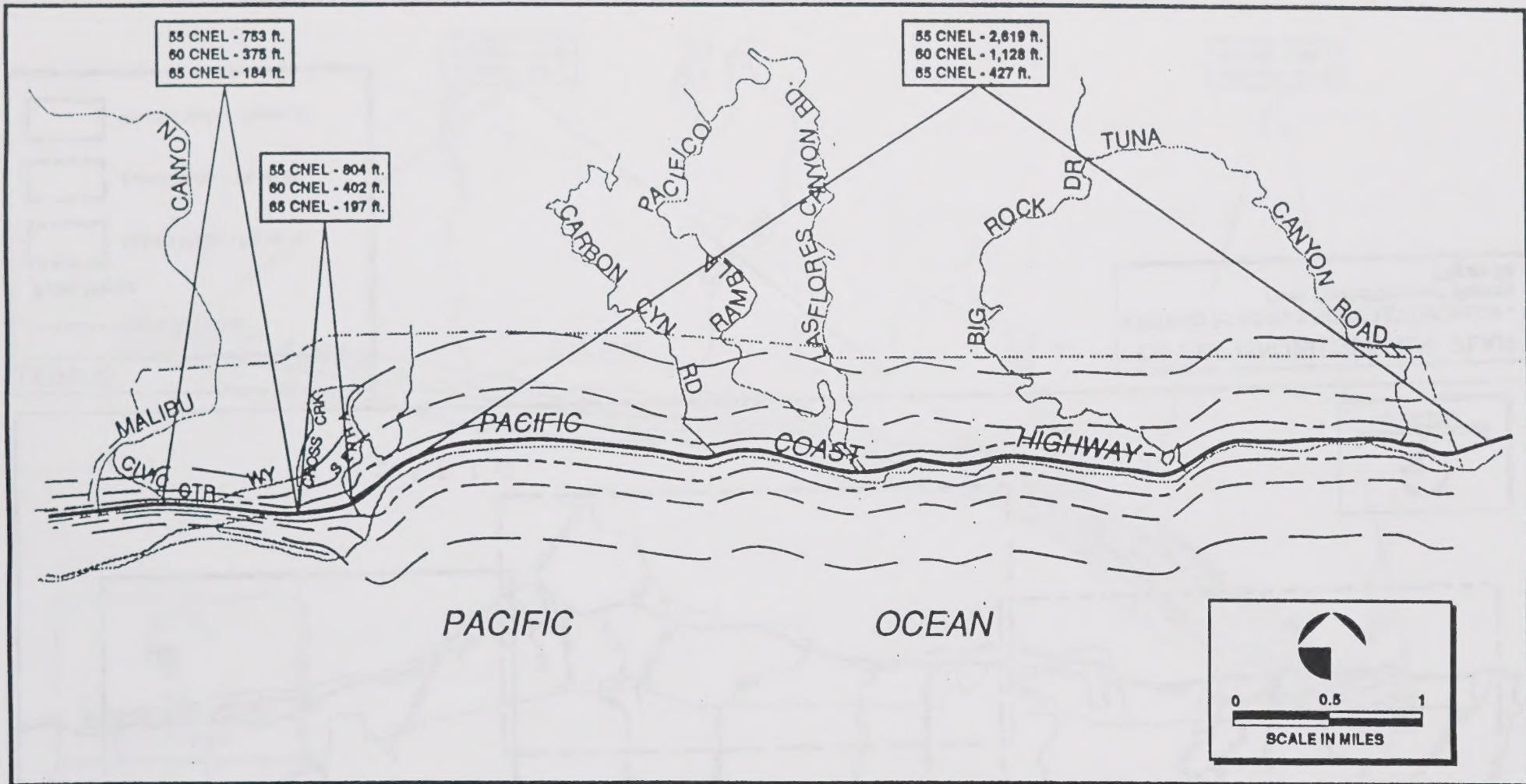
- Malibu City Limits
- Pacific Coast Highway
- Contour not visible at this scale — 75 dBA contour line
- Contour not visible at this scale — 70 dBA contour line
- Contour not visible at this scale — 65 dBA contour line
- 60 dBA contour line
- 55 dBA contour line

Note: CNEL distances are in feet from roadway centerline.

CITY OF MALIBU GENERAL PLAN

EXISTING ROADWAY NOISE LEVELS-WESTERN MALIBU
Annual Traffic

Figure 4d

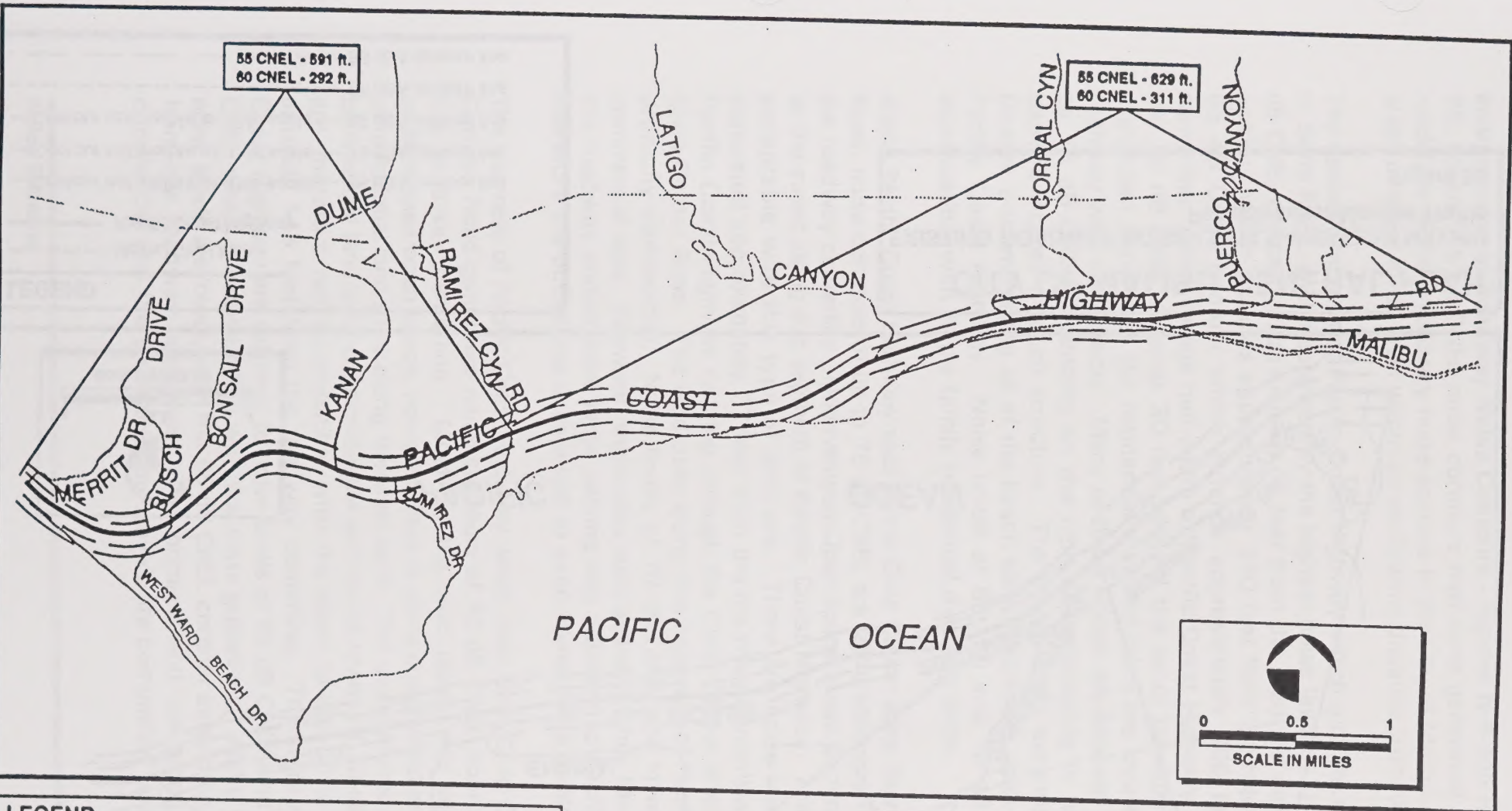


LEGEND

- Malibu City Limits
- Pacific Coast Highway
- Contour not visible at this scale — 75 dBA contour line
- Contour not visible at this scale — 70 dBA contour line
- 65 dBA contour line
- 60 dBA contour line
- 55 dBA contour line

CITY OF MALIBU GENERAL PLAN EXISTING ROADWAY NOISE LEVELS-EASTERN MALIBU Peak/Summer Months Traffic

Figure 5b



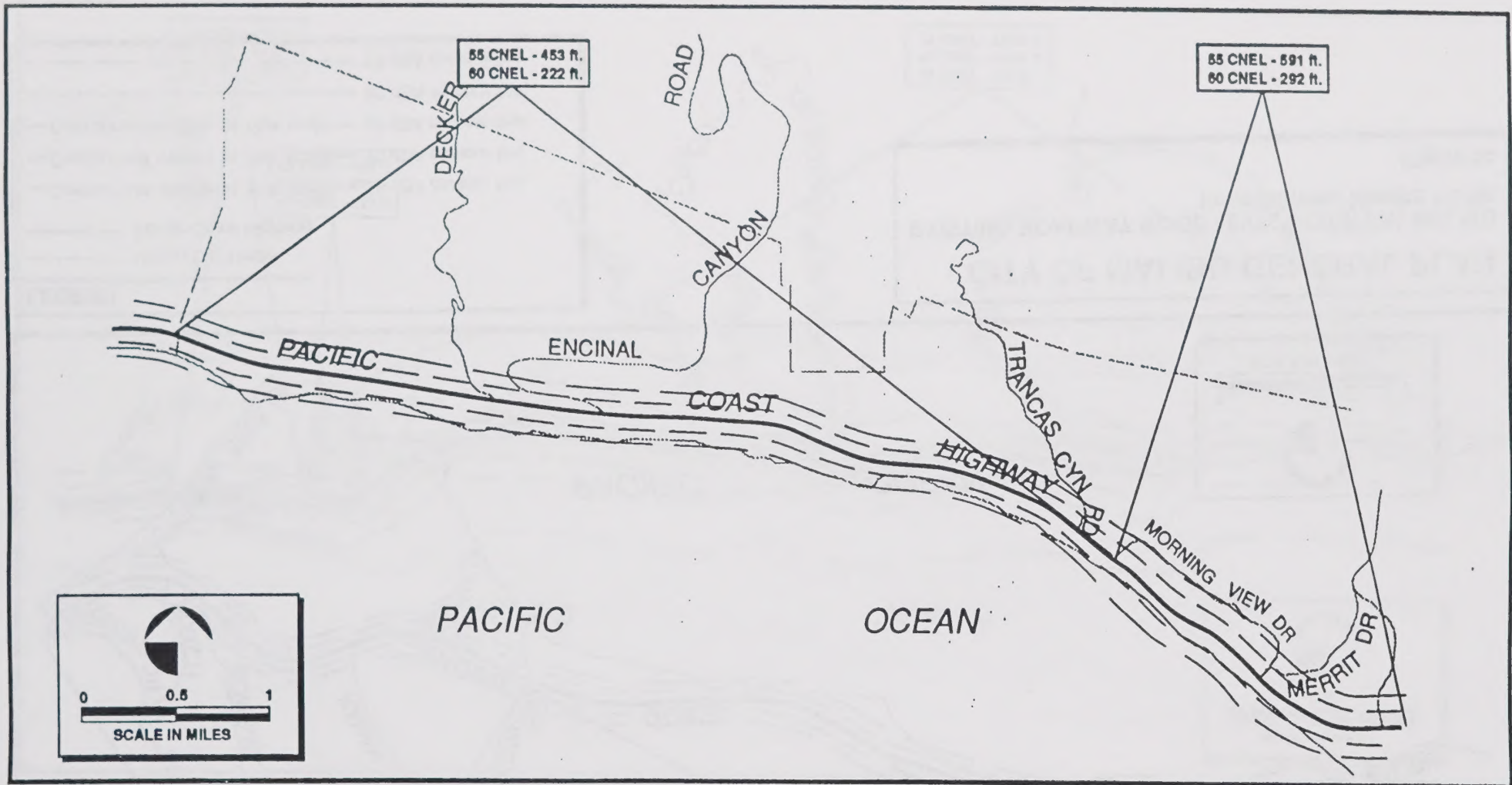
LEGEND

- Malibu City Limits
- Pacific Coast Highway
- Contour not visible at this scale — 75 dBA contour line
- Contour not visible at this scale — 70 dBA contour line
- Contour not visible at this scale — 65 dBA contour line
- 60 dBA contour line
- - - - - 55 dBA contour line

CITY OF MALIBU GENERAL PLAN

EXISTING ROADWAY NOISE LEVELS-CENTRAL MALIBU
Peak/Summer Months Traffic

Figure 5c



LEGEND

- Malibu City Limits
- Pacific Coast Highway
- Contour not visible at this scale — 75 dBA contour line
- Contour not visible at this scale — 70 dBA contour line
- Contour not visible at this scale — 65 dBA contour line
- 60 dBA contour line
- - - - - 55 dBA contour line

CITY OF MALIBU GENERAL PLAN
EXISTING ROADWAY NOISE LEVELS-WESTERN MALIBU
 Peak/Summer Months Traffic

Figure 5d

Interpretation of Roadway Noise Contours - Figures N-4 and N-5 display the 75, 70, 65, 60 and 55 dB CNEL noise contours that were generated using the FHWA noise model for existing roadway noise sources in the City of Malibu. The contours portray areas of equal noise level within an equivalent distance from the roadway centerline.

The eastern segment of Pacific Coast Highway which runs from the eastern City limits to Serra Road, is characterized by the highest noise levels. This area generates a 75 dB CNEL contour which extends 55 feet from the roadway centerline, a 70 dB CNEL contour which extends approximately 140 feet from the roadway centerline, and a 65 dB CNEL contour which extends approximately 400 feet from the roadway centerline. The average half-width of Pacific Coast Highway is 25 feet. Therefore, the 75 dB CNEL extends 30 feet beyond the outer boundary of the roadway. A significant number of the residential dwelling units are located along Pacific Coast Highway with no setbacks. Many of these homes are exposed to noise levels as high as 75 dB CNEL depending on the type of landscaping or other noise-attenuating barriers located at each structure. The 65 dB CNEL extends as far as the Pacific Ocean, encompassing all of the beach side residential units along this segment of Pacific Coast Highway. Noise levels of 65, 70 and 75 dB CNEL are considered incompatible with single family residential dwelling units.

Along Pacific Coast Highway east of the Civic Center area, Serra Road to Cross Creek Road, noise contours of up to 75 dB CNEL are generated approximately 52 feet from the roadway centerline. Undeveloped/Open space areas dominates the land adjacent to the street along this segment of Pacific Coast Highway. Noise levels of 75 dB are acceptable with this type of land use. There are noise contours of 70 dB CNEL generated approximately 87 feet from the roadway centerline along the segment of Pacific Coast Highway running through the Civic Center area, Cross Creek Road to Civic Center Road. The land uses along this segment of Pacific Coast Highway are primarily commercial. Noise levels of 70 dB CNEL and lower are compatible with commercial uses. However, most uses such as the Hughes Market are set back from the roadway and/or have large parking lots adjacent to Pacific Coast Highway and therefore the actual use is exposed to even lower noise levels.

The segment of Pacific Coast Highway which runs from Civic Center Way to Ramirez Canyon Road generates noise contours of 70 dB CNEL approximately 74 feet from the roadway centerline. Much of the land along this segment of the road is undeveloped/open space, however there is some commercial and a significant amount of residential land uses along there as well. The undeveloped/open space areas and commercial land uses are compatible with noise levels of 70 dB CNEL and below and are therefore not incompatible with the noise levels. The 65 dB CNEL contour extends 143 feet from the roadway centerline. Therefore residents along Pacific Coast Highway are exposed to noise levels of 65 dB CNEL and to some extent 70 dB CNEL which is incompatible with the state guidelines. Along Cross Creek Road, the noise levels are lower, with the 65 dB CNEL contour extending approximately 51 feet from the roadway centerline. The primary land use along Cross Creek Road is commercial and therefore the noise levels are compatible with the land uses.

**Insert
Figure N-4(A)**

Figure 14-15

**Insert
Figure N-4(B)**

**Insert
Figure N-4(C)**

Figure 11-4(c)

Figure 11-400

**Table 6-2:
Existing Roadway Noise Levels**

Roadway Segment	Distance to Community Noise Equivalent Level from Roadway Centerline				
	75'	70'	65'	60'	55'
Pacific Coast Highway west of Topanga Canyon Road east of Serra Road	55.0	139.2	394.7	1,052.4	2,468.1
Pacific Coast Highway west of Serra Road east of Cross Creek	52.2	93.2	185.8	379.4	761.6
Pacific Coast Highway west of Cross Creek east of Civic Center Way	0.0	87.0	172.3	351.7	708.2
Pacific Coast Highway west of Civic Center Way east of Ramirez Canyon Road	0.0	73.8	143.0	291.5	590.6
Pacific Coast Highway west of Ramirez Canyon Road east of Morning View Drive	0.0	69.4	133.2	271.0	550.2
Pacific Coast Highway west of Morning View Drive east of (western) City limit	0.0	55.8	101.8	204.5	417.1
Cross Creek Road north of Pacific Coast Highway	0.0	0.0	51.3	104.9	218.3
Malibu Canyon Road north of Pacific Coast Highway south of Civic Center Way	0.0	0.0	50.6	103.5	215.3
Malibu Canyon Road north of Civic Center Way	0.0	0.0	81.5	169.3	350.0
Kanan Dume Drive north of Pacific Coast Highway	0.0	0.0	0.0	62.9	130.0

Source: Harland Bartholomew & Associates, 1992

**Table 6-3:
Existing Roadway Noise Levels During Summer Months**

Roadway Segment	Distance to Community Noise Equivalent Level from Roadway Centerline				
	75'	70'	65'	60'	55'
Pacific Coast Highway west of (eastern) City limit east of Serra Road	58.3	150.5	426.5	1,128. 1	2,618. 7
Pacific Coast Highway west of Serra Road east of Cross Creek	54.3	98.2	196.7	401.5	803.9
Pacific Coast Highway west of Cross Creek east of Civic Center Way	51.7	92.2	183.6	374.9	752.9
Pacific Coast Highway west of Civic Center Way east of Ramirez Canyon Road	0.0	78.0	152.4	310.8	628.5
Pacific Coast Highway west of Ramirez Canyon Road east of Morning View Drive	0.0	73.9	143.2	291.9	591.4
Pacific Coast Highway west of Morning View Drive east of (western) City limit	0.0	59.3	110.0	222.2	452.9
Source: Harland Bartholomew & Associates, 1992					

Noise contours of up to 65 db CNEL are generated along Malibu Canyon Road between Pacific Coast Highway and Civic Center Way and extend approximately 51 feet from the roadway centerline. The area to the east of the roadway is undeveloped/open space and the area to the west is not within the City limits. North of Civic Center Way, contours of up to 65 dB CNEL extend approximately 82 feet from the roadway centerline. The land uses along this segment of Malibu Canyon Road include the Hughes Aircraft Research Facility, religious facilities and residential uses. Most of the structures are set back from the roadway and are not exposed to this noise level. Noise levels of 60 dB CNEL and below are compatible with all land uses.

There are similar noise contours generated along Pacific Coast Highway running west of Ramirez Canyon Road to Morning View Drive. The noise levels of up to 70 dB CNEL are compatible with the commercial uses in the area, however these noise levels are incompatible with both the multi-family and single family residential land uses located in the area. The 70 dB CNEL contours extend approximately 70 feet from the roadway centerline and many of the residential uses may be set back farther

than 45 feet from the edge of the roadway and would not be exposed to these noise levels. Noise contours of 65 dB CNEL extend approximately 133 feet from the roadway centerline. Multi-family residential uses are compatible with this noise level but 65 dB CNEL noise levels are incompatible with the existing single family residential land uses.

Along Kanan Dume Drive north of Pacific Coast Highway the highest noise contours are 60 dB CNEL which extend approximately 63 feet from the roadway centerline. This noise level is compatible with all land uses.

The segment of Pacific Coast Highway that runs from Morning View Drive to the western City limits is dominated by undeveloped/open space areas, single family residential uses, and a limited number of commercial uses. The 70 dB CNEL noise contours extend approximately 56 feet from the roadway centerline or approximately 30 feet from the edge of the roadway. The undeveloped/open spaces areas and commercial uses are not incompatible with this noise level. Many of the single family residential land uses are set back farther than 30 feet from the edge of the roadway and are not exposed to this noise level. The 65 dB CNEL noise contour extends approximately 100 feet from the roadway centerline, or 75 feet from the edge of the roadway. Many of the single family residential units may have setbacks of greater than 75 feet or have landscaping or some other form of sound barrier and therefore may not be within the 65 dB CNEL contour. The single family land uses that are within 65 dB CNEL are exposed to noise levels incompatible with the land uses.

Figure N-5 represents noise contours generated by vehicular traffic along Pacific Coast Highway during the peak traffic months, typically June through September. The noise contours generated by peak vehicular traffic extend slightly farther than the noise contours generated during the non-peak months. There are few differences in the distances of the contours, the higher contours extend approximately two to three feet (75 dB CNEL) farther, three to 11 feet longer (70 dB CNEL), and nine to 30 feet longer (65 dB CNEL) during the peak season. The same land uses which are affected by high noise levels during the off-peak season are affected during the peak season, with no additional uses affected. The exception occurs on the segment of Pacific Coast Highway which runs from Cross Creek Road to Civic Center Way. The 75 dB CNEL contour extends approximately 52 feet from the roadway centerline during the peak season and there is no 75 dB CNEL contour during the off-peak season. The commercial uses along this segment of the road are set back from the highway and would not be exposed to the higher noise levels.

The noise measurements described above indicate that noise levels in the majority of the areas surveyed in the City are compatible with the surrounding land uses according to State guidelines. The noise contours in Malibu indicate that the eastern portion of the City experiences greater noise levels than the western portion and that, according to State guidelines, homes not located along Pacific Coast Highway are generally not exposed to unacceptable levels of noise. However, comments made during all phases of the citizen participation process indicate that City residents have found the level of noise, particularly during peak visitor days, to be unacceptable.

**Table 6-4:
Maximum Exterior Noise Limits
Non-Transportation Sources**

Receiving Land Use Category	General Plan Land Use Districts	Time Period	Noise Level, dBA	
			L_{eq}	L_{max}
Rural	All RR Zones and PRF, CR, AH, OS	7 am - 7 pm	55	75
		7 pm - 10 pm	50	65
		10 pm - 7 am	40	55
Other Residential	All SFR, MFR and MFBF Zones	7 am - 7 pm	55	75
		7 pm - 10 pm	50	65
		10 pm - 7 am	45	60
Commercial, Institutional	CN, CC, CV, CG, and I	7 am - 7 pm	65	85
		7 pm - 7 am	60	70

**Table 6-5:
Maximum Allowable Noise Exposure
Transportation Noise Sources**

Land Use	Outdoor Activity Areas ⁽¹⁾ $L_{dn}/CNEL$, dB	Interior Spaces	
		$L_{dn}/CNEL$, dB	L_{eq} / dB ⁽²⁾
Residential	50 ⁽³⁾	45	---
Transient Housing	60 ⁽³⁾	45	---
Hospitals, long term in-patient medical treatment and care facilities	60 ⁽³⁾	45	---
Theaters, Auditoria, Music Halls	60 ⁽³⁾	---	35
Churches and Meeting Halls	60 ⁽³⁾	---	40
Office Buildings	60 ⁽³⁾	---	45
Schools, Libraries and Museums, Child Care	60 ⁽³⁾	---	45
Playgrounds and Neighborhood Parks	70	---	---

- (1) Where the location of outdoor activity areas is unknown; the exterior noise level standard shall be applied to the property line of the receiving land use.
- (2) As determined for a typical worst-case hour during periods of use.
- (3) Where it is not possible to reduce noise in outdoor activity areas to 50 dB $L_{dn}/CNEL$ or less using practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB $L_{dn}/CNEL$ may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

6.4 Goals, Objectives, Policies and Implementation Measures

N GOAL 1: ACCEPTABLE NOISE LEVELS.

N OBJECTIVE 1.1: A comprehensive noise control program.

- N Policy 1.1.1:** The City shall protect residences, parks and recreational areas from excessive noise to permit the enjoyment of activities.
- N Policy 1.1.2:** The City shall protect noise sensitive land uses from negative impacts of proximity to noise generating uses.
- N Policy 1.1.3:** The City shall reduce noise along PCH.
- N Policy 1.1.4:** The City shall work with businesses and residents in a joint effort to plan, control, and attain an acceptable noise environment.
- N Policy 1.1.5:** The City shall encourage new construction and remodels which utilize designs and materials that reduce exposure to noise sources.
- N Policy 1.1.6:** The City shall review proposed development to ensure the average ambient noise is as low as feasible to maintain the rural atmosphere.

To implement these policies the City shall:

N Implementation Measure 1: Adopt a noise control ordinance to minimize or eliminate unacceptable noise levels.

N Implementation Measure 2: Limit maximum permissible noise levels from all sources, including but not limited to filming, motorized vehicles, construction, leaf blowers and other landscaping equipment.

N Implementation Measure 3: Maintain the Building Code Sound Transmission Control Standards of the State Building Code, Title 24, Part 2, Appendix 35 within the City's adopted Building Code.

N Implementation Measure 4: Require acoustical studies for major commercial development projects, and impose noise mitigation measures accordingly.

N Implementation Measure 5: Restrict the hours and days of construction, grading, and filming to reduce noise from this source.

N Implementation Measure 6: Require an acoustical analysis as part of proposed development to ensure that noise mitigation is included in the project where activities associated with proposed uses are likely to produce noise levels exceeding the adopted City noise level standards, at existing or planned noise-sensitive uses, including but not limited to, residences, schools, hospitals, long term in-patient medical treatment and care facilities, churches and libraries,

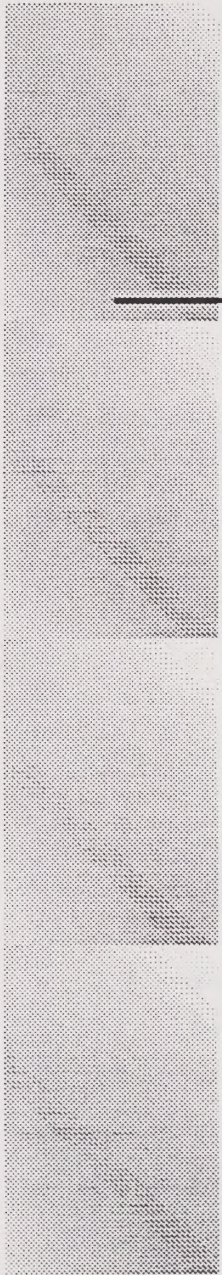
N Implementation Measure 7: Use site planning and project design as noise mitigations to achieve the specified standards for transportation or non-transportation sources.

N Implementation Measure 8: Use open space, wherever practical, to provide an adequate spatial separator between noise sources and sensitive land uses. Use noise barriers as a supplemental means of achieving the noise standards after all feasible design related noise mitigation measures have been integrated into the project.

N Implementation Measure 9: Encourage Caltrans to fund only those re-pavement projects that utilize low-noise paving materials to minimize traffic noise.

N Implementation Measure 10: Incorporate the consideration of noise impacts on significant wildlife habitats into the development review process.

HOUSING ELEMENT



HOUSING
ELEMENT

The Housing Element is a key component of the local government's planning process. It provides a framework for the development of housing policies and programs. The element is required by the California Housing Act of 1999, which mandates that local governments prepare and adopt a housing element as part of their general plan. The element should address the needs of the community, including the provision of affordable housing, the promotion of diverse housing types, and the protection of the environment.

The Housing Element is a key component of the local government's planning process. It provides a framework for the development of housing policies and programs. The element is required by the California Housing Act of 1999, which mandates that local governments prepare and adopt a housing element as part of their general plan.

The Housing Element is a key component of the local government's planning process. It provides a framework for the development of housing policies and programs. The element is required by the California Housing Act of 1999, which mandates that local governments prepare and adopt a housing element as part of their general plan. The element should address the needs of the community, including the provision of affordable housing, the promotion of diverse housing types, and the protection of the environment.

The Housing Element is a key component of the local government's planning process. It provides a framework for the development of housing policies and programs. The element is required by the California Housing Act of 1999, which mandates that local governments prepare and adopt a housing element as part of their general plan.

The Housing Element is a key component of the local government's planning process. It provides a framework for the development of housing policies and programs. The element is required by the California Housing Act of 1999, which mandates that local governments prepare and adopt a housing element as part of their general plan.

Table of Contents

7.1	Introduction	1
7.1.1	Legislative Authorization	1
7.1.2	Purpose and Scope	1
7.1.3	Relationship to Other Elements	3
7.1.4	Background	5
7.2	Housing Needs Assessment	7
7.2.1	Housing Stock Condition	8
7.2.1.1	Housing Conditions	9
7.2.1.2	Housing Conservation	9
7.2.2	Housing Assistance Needs	10
7.2.2.1	Ability-to-Pay	10
7.2.2.2	Household Characteristics	11
7.2.2.3	Income Limits	11
7.2.2.4	Housing Overpayment	12
7.2.3	Special Housing Needs	13
7.2.3.1	Farm Workers and Day Workers	14
7.2.3.2	Large Family Households/Overcrowded Households	17
7.2.3.3	Female Headed Households	17
7.2.3.4	Homeless	18
7.2.3.5	Handicapped/Disabled	19
7.2.3.6	Elderly	20
7.2.3.7	At-Risk Housing	21
7.2.4	Projected Housing Needs	21
7.2.4.1	Population	21
7.2.4.2	Employment	22
7.2.5	Share of Regional Housing Needs	23
7.2.6	Energy Conservation Opportunities	24
7.3	Inventory of Resources and Constraints	25
7.3.1	Housing Supply Characteristics	25
7.3.1.1	Residential Development Trends	25
7.3.1.2	Status of Current Residential Development	26
7.3.2	Assessment of Land Suitable for Residential Development	28
7.3.3	Inventory of Non-Governmental Constraints	33
7.3.3.1	Environmental Constraints	34
7.3.3.2	Market Forces	39
7.3.3.3	Access to Public Facilities and Services	42
7.3.4	Inventory of Governmental Constraints	45
7.3.4.1	Ordinances	46
7.3.4.2	Permit Processing	47
7.3.4.3	Fees	48
7.3.4.4	Financial Constraints	51

7.3.4.5	Affordable Housing Opportunities	51
7.3.4.6	Affordable Housing Site Inventory	53
7.4	Goals, Objectives, Policies and Implementation Measures	63
	Appendix A: Comparison of Development Fees	74
	Appendix B: Social Service Providers Serving the City of Malibu and Surrounding Areas	76

7.1 Introduction

In 1967, California enacted a law mandating a housing element as part of a General Plan. During the past 28 years numerous revisions have been

made to the required contents of community housing elements. In 1981, Article 10.6 of the Government Code was enacted and, as amended from time to time, describes the current content requirements of local housing elements. This statute, commonly referred to as the Roos Bill, requires that a local housing element include the following: an assessment of existing and projected housing needs; an inventory of resources and constraints to meeting the City's housing needs; a statement of goals, policies and quantified objectives; financial resources; an inventory of adequate sites for all types of housing; and a five-year housing program for the preservation, improvement and development of housing.

7.1.1 Legislative Authorization

Government Code Section 65302(c) requires the preparation of a housing element to assure the adequate provision of housing for all segments of the community. In 1977, "Housing Element Guidelines" were first published by the State Department of Housing and Community Development (HCD). The Guidelines spelled out not only the detailed content requirements of housing elements but also gave HCD a "review and approval" function over this element of the General Plan. In 1981, the Roos Bill (enacting Article 10.6 of the Government Code) codified the guidelines into the statute and changed HCD's role from "review and approval" to one of "review and comment" on local housing elements. The legislation also requires review of the housing element every five years.

Section 65588 of the California Planning Law requires each housing element to include an analysis of the City's progress in implementing its prior housing element. Since this is the City's first Housing Element, no such review is possible.

7.1.2 Purpose and Scope

The purpose of the Housing Element is to identify local housing problems and projected needs and to identify measures necessary to mitigate and alleviate problems and meet the housing needs for all economic segments of the community. Another key purpose of the Housing Element is to contribute to meeting the state housing goal as stated below:

The availability of housing is of vital statewide importance, and the early attainment of decent housing and a suitable living environment for every California family is a priority of the highest order (Government Code Section 65580).

General, statewide purposes of local housing elements are influenced by the legislative policy and intent of Article 10.6. Section 65581 contains the following declarations which describe the legislature's intent in enacting the most recent revisions to the housing element law:

- (a) *To assure that counties and cities recognize their responsibilities in contributing to the attainment of the state housing goal.*
- (b) *To assure that counties and cities will prepare and implement housing elements which, along with federal and state programs, will move toward the attainment of the state housing goal.*
- (c) *To recognize that each locality is best capable of determining what efforts are required by it to contribute to the attainment of the state housing goal, provided such a determination is compatible with the state housing goal and regional housing needs.*
- (d) *To ensure that each local government cooperates with other local governments in order to address regional housing needs.*

The Housing Element is organized to present information addressing each principle topic and presented in two parts, as listed below:

Part 1:	Sec. I	Introduction and Background
	Sec. II	Housing Needs Assessment
	Sec. III	Inventory of Resources and Constraints
Part 2:	Sec. IV	Statement of Goals, Objectives and Policies, Financial Resources, and a Five-Year Housing Program

The housing needs assessment includes an analysis of the following factors:

1. Conditions of the existing housing stock
2. Housing cost in relation to ability to pay
3. Housing needs of special groups
4. Population and employment trends and projections
5. Share of regional housing needs
6. Energy conservation opportunities

The inventory of resources and constraints includes an assessment of the factors listed below:

1. Land supply: residential acreage; availability of suitable residential sites
2. Availability and capacity of local public services and facilities
3. Residential land use and zoning controls
4. Building codes and enforcement
5. Site improvement requirements
6. Fees and other exactions required of residential developments

7. Local processing and permit procedures
8. Utilization of State and Federal housing programs
9. Land costs
10. Construction costs
11. Availability of financing
12. Energy conservation
13. Analysis of the loss of subsidized housing, if any.

The final major components of this housing element are described below:

1. *A statement of the community's goals, quantified objectives, and policies relative to the maintenance, improvement and development of housing. [Government Code Section 65583 (b)]*
2. *A program which sets forth a five-year schedule of actions the local government is undertaking or intends to undertake to implement the policies and achieve the goals and objectives of the housing element through the administration of land use controls, provision of regulatory concessions and incentives, and the utilization of appropriate federal and state subsidy programs. [Government Code Section 65583 (c)]*

7.1.3 Relationship to Other Elements

The Housing Element is consistent with all of the other General Plan elements and is particularly related to the Land Use Element.

Land Use Element: Stated briefly below are the major aspects of interrelationship between the Land Use and Housing Elements:

- **Residential land use densities:** Both the Land Use Element and the Housing Element rely on identical land use plans for future development in the City. Land use densities developed for the Land Use Element are consistent with the analysis and plans contained in this Housing Element.
- **Suitability of land for various housing types, densities and products:** The Land Use Policy Map presented in the Land Use Element was developed in recognition of the significant environmental constraints in the City. Specifically, the Land Use Policy Map was developed using information regarding areas subject to flooding (both canyon-related and ocean-related); liquefaction; landslides; seismic zones and faults; significant wildlife corridors, habitats and resources; and other significant environmental constraints identified in the Safety Element and Conservation Element.
- **Amount of land allocated to residential land use:** The Land Use Policy Map identifies the overwhelming portion of the City is designated for residential uses.

- **Goals and policies affecting housing and residential land characteristics:** The Land Use Element recognizes the need to preserve existing neighborhoods and development consistent with the predominately rural residential community.

Circulation Element: The Circulation Element was developed concurrent with the Land Use Element. The proposed master plan of roads is based on the projected demand of future land uses, including housing development. The Circulation Element documents that the City's primary and essential thoroughfare, Pacific Coast Highway, is already overtaxed, that due to geography and topography it will not likely be widened, and that the commuting to work is currently difficult and not likely to improve. The Circulation Element identifies significant constraints to building new housing in the City and this constraint is addressed in this Housing Element and in the Circulation Element.

Open Space Element: The Open Space Element includes specific recommendations for the use of the City's significant open space opportunities, include beaches, federal, state, county and City parkland, and other recreational resources. The projected local demand for these open space resources was developed based on the objective of preserving unique and sensitive habitats while meeting the needs of the local and regional community. The Housing Element is consistent with the Open Space Element; growth projected in the Housing Element can be accommodated by the recreational and other open space resources designated in the Open Space Element.

Conservation Element: The Conservation Element identifies significant resources in the City to be protected, restored or enhanced. The Conservation Element is consistent with the Land Use Policy Map and, therefore, is consistent with the projected growth in the City's housing stock.

Noise Element: The Noise Element assesses the compatibility of housing with the City's noise levels in two ways. First, noise impacts in residential and other noise sensitive areas are addressed in that element. In general, all residential locations are considered to be noise-sensitive land uses within the City. In addition, schools, libraries and parks are considered to be noise-sensitive land uses. The Land Use Element provides a description of the residential areas throughout the City and is considered the source for the inventory of noise-sensitive land uses. The City's Land Use Element proposes residential development in areas with appropriate ambient noise levels.

Safety Element: The Safety Element documents the significant constraints on any type of development in the City including flood-prone areas, seismic zones, landslides, steep slopes, areas susceptible to liquefaction, wave action, high fire risk areas, and similar hazards.

7.1.4 Background

The four census tracts which cover the City, 8004.01, 8004.02, 8005.01 and 8005.02 from west to east, covers an area far greater than the City boundaries (see Figure H-1). The surveys for the 1990 Census were conducted on April 1, 1990, 12 months prior to incorporation on March 28, 1991. The 1990 tracts were created from tracts 8004 and 8005 which covered the City in 1980. To obtain estimates of the number of dwelling units and population, the County of Los Angeles Department of Regional Planning overlaid the City boundary upon the 1990 Census tract and block boundaries. Block level data was used to isolate housing counts between the City and unincorporated areas. Where the blocks were split by city boundaries, department staff field counted housing units within the portion of the block located within the City. To determine demographic trends, the percentage of dwelling units and population located within Malibu was used as the base percentage for all other statistics.¹

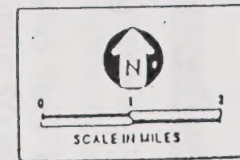
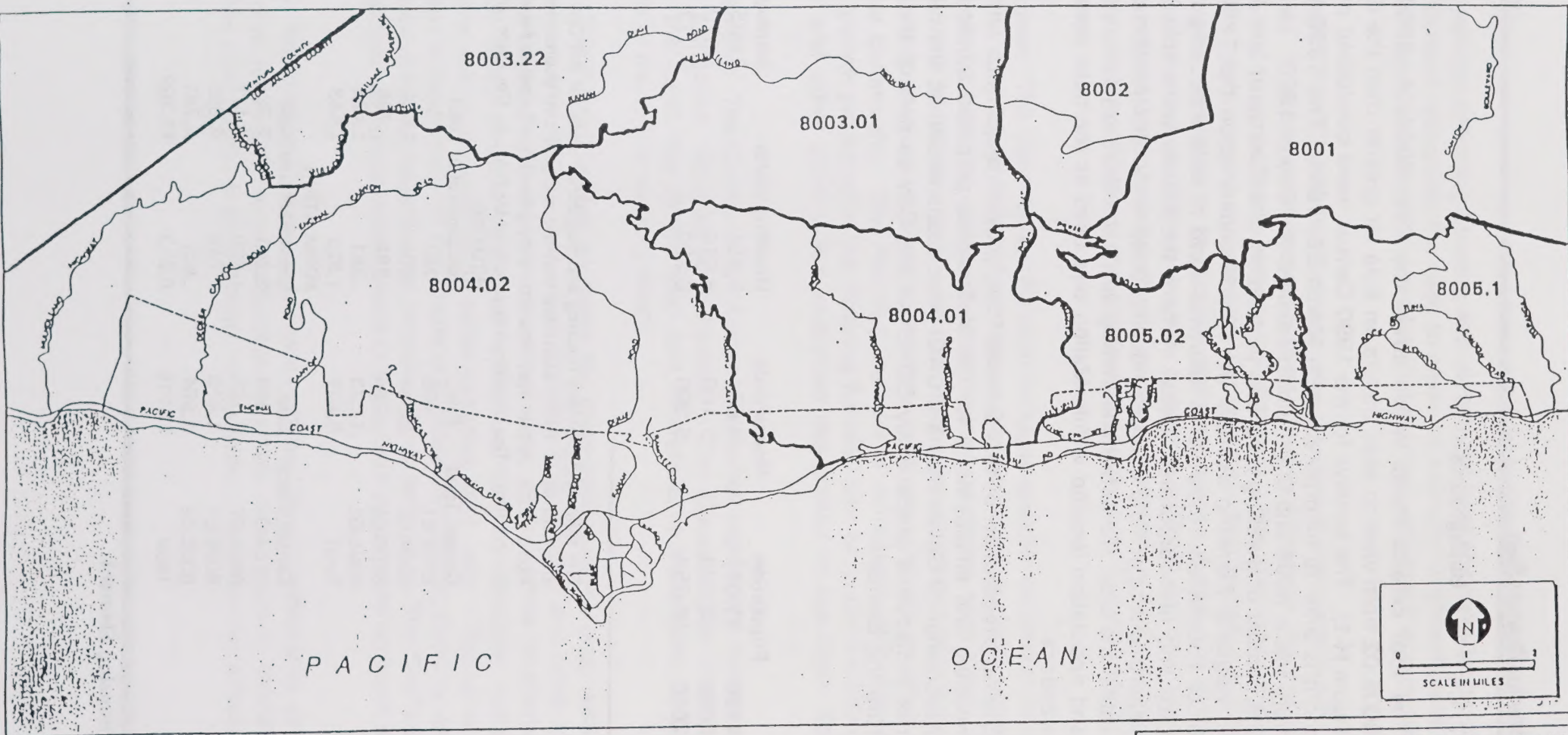
During preparation of this General Plan, growth projections (including the share of housing and employment) for the Malibu area prepared by the Southern California Association of Governments (SCAG) were made available; the following summarizes the projections prepared by SCAG for the City as part of the preparation of this Housing Element:

	Population	Households	Dwelling Units	Employment	Source
1990	11,643	4,874	5,851	7,665	SCAG
2000	12,023	5,100	6,010	7,870	SCAG
2010	14,254	5,300	6,220	8,072	SCAG

¹

The following provides housing and population data for the City and the unincorporated areas for April, 1990, assuming that the adopted city boundaries were in place as of April, 1990. In this way, the data may provides a baseline for all subsequent estimates for the City. The division was prepared by the L.A. Co. Dept. of Regional Planning.

HOUSING				
Census Tract	City	Unincorporated	Total	Percent
8004.01	408	287	695	58.7%
8004.02	3,336	303	3,639	91.7%
8005.01	754	981	1,735	43.5%
8005.02	1,123	351	1,474	76.2%
Total	5,621	1,922	7,543	74.5%
POPULATION				
Census Tract	City	Unincorporated	Total	Percent
8004.01	597	2,201	2,798	21.3%
8004.02	7,125	1,000	8,125	87.7%
8005.01	1,410	2,245	3,655	38.6%
8005.02	1,984	807	2,791	71.1%
Total	11,116	6,253	17,369	64.0%



SOURCE: Southern California Assoc. of Governments, 1993

CITY OF MALIBU GENERAL PLAN
Exhibit H-1
1990 Census Tract Boundaries

These projections were based on a combination of cohort and straight line projections, assuming that the persons per household ratio continues to decline as it had over the period between 1980 and 1990.

The 1989-1994 Regional Housing Needs Assessment (RHNA) was prepared by SCAG prior to the incorporation of Malibu. Although that RHNA does not provide specific numbers of housing units needed in the City for the current planning period, the City can use the analysis and formula employed by SCAG to determine the projected housing need for the planning period that will end in the year 2000. SCAG has indicated that when it prepares the RHNA for the planning period beginning June 30, 1996, and ending June 30, 2000, it will include numbers for the City of Malibu and rely on this data. The City may anticipate SCAG's determination of the City's future housing needs. Therefore, this housing element relies on SCAG's data rather than Los Angeles County's Department of Regional Planning's data to calculate the City's housing needs.

7.2 Housing Needs Assessment

The following section contains the needs assessment required by state law and guidelines. There are four subjects discussed in the needs assessment

analysis, including the following:

1. **Condition of the housing stock:** This sub-section of the housing needs assessment describes the condition of the existing housing supply. The analysis of housing conditions and associated improvement needs is specifically required by the California Planning Law, Section 65583(a)(2) which requires an analysis of housing characteristics including "housing stock condition."
2. **Housing needs of households now residing in Malibu:** This section of the housing needs assessment is concerned with the households now residing in Malibu. Pursuant to California planning law, the assessment focuses on the households whose housing costs exceed ability-to-pay.
3. **Special housing needs:** This section of the needs assessment addresses six household types --- handicapped, elderly, large families, farm-workers, families with female heads of household, and families and persons in needs of emergency shelter.
4. **Projected need for new housing construction:** This section discusses the need for future affordable housing in the City to respond to regional needs while recognizing both existing housing opportunities in the City and environmental constraints.

7.2.1 Housing Stock Condition

The housing stock of Malibu is largely made up of low-density, single-family detached housing. In 1990, there were a total of 5,851 housing units. The attached and detached single-family unit (owned and rented) represented nearly 72 percent of the housing stock. Small apartment complexes (two to four units per structure) and large complexes (ten or more units per structure) were the primary source of rental housing in Malibu, constituting approximately 7 to 8 percent each of housing units, respectively. Mobile homes constituted 10.2 percent of all housing units. The percentages for single family homes and mobile homes were slightly lower in 1980 than in 1990 while the percent of multi-family homes was higher in 1980 than in 1990, as shown on Table 7-1.

Table 7-1: Housing Stock - 1980 and 1990
(by number of units in structure)

Structure	1980	Percent	1990	Percent
1 units	3,471	69.1%	4,18	71.6%
2-4 units	459	9.1%	398	6.8%
5-9 units	230	4.6%	176	3.0%
10 + 22 units	512	10.2%	491	8.4%
Mobile Homes	349	7.0%	597	10.2%
Total	5,021	100%	5,851	100%
Sources: U.S. Census, 1980; U.S. Census, 1990				

Conclusion: The 1990 census information and a subsequent windshield survey of housing units in the City conducted during preparation of this General Plan indicates that the overwhelming condition of the City's existing housing stock is very good to excellent. Only 47 units have been identified as in need of repair or rehabilitation. There are at present no City-sponsored housing program to address this issue. Therefore, the City's future housing programs should address the need to ensure that existing units continue to be in very good to excellent condition.

7.2.1.1 Housing Conditions

The majority of Malibu residents are well-housed. The 1990 Census reports that only 47 units (0.3 percent) lack complete plumbing for exclusive use. The existing housing stock is composed primarily of single family dwelling units, constructed of several different materials, including wood frames with stucco, bricks and other materials. Seventy-four percent of the total stock was 30 years old or newer as of the 1990 Census.

The City's Building Official indicates that the City's housing stock is in very good to excellent condition; very few housing units in the City are not in full-compliance with applicable building and safety codes and related ordinances. In addition, during the preparation of this Housing Element, a windshield survey of the City was conducted; every accessible residential street was surveyed. The windshield survey supported the information contained in the 1990 Census and the observations of the City's Building Official that the City's housing stock is in very good to excellent condition. There are no areas of the City that demonstrate an emerging problem with the condition of the City's housing stock.

The firestorms of November 2-5, 1993 destroyed or damaged 268 homes in the City. Reconstruction of destroyed homes and Repair of damaged homes is underway.

Conclusion: Repairs and/or reconstruction to fire-damaged homes is either underway or anticipated to begin in the next several months. In response to the need of homeowners and residents to return to safe housing, the City is expeditiously processing building permit applications to rebuild damaged or destroyed residences. In addition, less than 1 percent of the City's existing housing stock (47 units) have been identified as substandard. City building inspectors will continue to monitor housing conditions in the City and will identify specific remedial steps necessary to ensure that public health and safety is not threatened.

7.2.1.2 Housing Conservation

"Conservation" means the maintenance and protection of existing housing units for residential use without actual physical rehabilitation.

Reportedly, a significant trend over the last decade has been the offering of accessory buildings and other surplus household space as rental units. Although this practice was not allowed by the County of Los Angeles, the City allows the creation of second units on all residentially zoned land in the City. These units will remain a significant and valuable source of affordable housing for individuals and small families.

The decrease in the number of multi-family housing units between 1980 and 1990 (as shown in Table 7-1) was the result of policies in place prior to the incorporation of the City; it appears that multi-family housing units along Pacific Coast Highway

were replaced with commercial uses in the early to mid-1980s, prior to the City's incorporation. The units removed were primarily older units in need of substantial repair; in addition, these were not units affordable to low or moderate income families. Therefore, there was no decrease in the number of units available for low and moderate income families.

The City's most significant source of affordable housing are mobile home park units. The City's mobile home parks provide a resource for households on limited or fixed incomes to live in Malibu. The City has adopted a mobile home park rent stabilization ordinance to ensure that mobile homes continue to provide affordable housing opportunities. These housing units should be conserved by the City in future years.

7.2.2 Housing Assistance Needs

These needs are generated when housing costs exceed ability to pay for shelter. The term housing assistance refers to the need for financial assistance to bridge the gap between housing costs and economic capabilities. The assessment of housing assistance needs is based on the following requirements established Statewide for local housing elements:

...a quantification of the locality's existing and projected housing needs for all income levels [Section 65583(a)(1)]

Analysis and documentation of household characteristics, including level of payment compared to ability to pay... [Section 65583(a)(2)]

Four factors are examined when considering Malibu's housing assistance needs:

1. Ability-to-pay for housing
2. Income groups residing in Malibu
3. Housing costs as a percentage of income by income and tenure
4. Number of households (owner and renter) by income groups whose housing costs exceed ability to pay

7.2.2.1 Ability-to-Pay

Ability to pay varies as a function of income. Typically, housing costs have been considered to be excessively burdensome when they consumed 25 percent or more of a family's income. However, currently, several State and Federal programs consider housing costs to be excessive when a lower income household expends more than 30 percent of its income on housing. This is a reflection of reality; people are often willing to spend more on housing to achieve a desired life-style.

7.2.2.2 Household Characteristics

The typical Malibu household lives in a single-family, detached dwelling.

7.2.2.3 Income Limits

The United States Department of Housing and Urban Development (HUD) estimates "area family income." (Note: The definitions of a family and a household are the same as HUD regulations.) A set of factors is used to calculate income limits by "family" size and these income limits are then used to categorize households by income. The median income in the County of Los Angeles in 1990 was \$38,900. The following is an explanation of the income categories:

- Very Low Income Households: Those households whose income is not more than 50 percent of the region's median income, adjusted for household size
- Low Income Households: Those households whose income is between 50 percent and 80 percent of the region's median income
- Moderate Income Households: Those households whose income is between 80 percent and 120 percent of the region's median income
- Above Moderate Income Households: Those households whose income is greater than 120 percent of the region's median income

Table 7-3 presents the detailed income limits by category per the Regional Housing Needs Statement for 1993.

Table 7-3: Income Limits by Category Regional Housing Needs Statement Los Angeles Region - 1993

Income Category	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Very Low	\$16,900	\$19,300	\$21,750	\$24,150	\$26,100	\$28,000	\$29,950	\$31,900
Low	\$27,050	\$30,900	\$34,800	\$38,650	\$41,750	\$44,800	\$47,900	\$51,000

Source: U.S. Housing and Urban Development Income Limits,

The City has an identified need for additional affordable housing for very low, low and moderate income families. The identified need for the City would normally be

prepared by the Southern California Association of Governments (SCAG). However, as discussed elsewhere in this element, SCAG's "Regional Housing Needs Assessment" (RHNA) was prepared prior to the City's incorporation; further, SCAG has not updated the RHNA due to state budget cutbacks. Therefore, in the absence of RHNA projections of housing, this Housing Element relies on the same formulas SCAG traditionally uses to calculate RHNAs. Specifically, the City started with the projected number of new households (226) for the year 2000 and determined the following allocation of new housing units based on the household income data from U.S. Census information, using the formula to adjust for avoidance of impact: 11% for very low income families; 12% for low income families; 13% for moderate income families and the remaining 64% for those families above the moderate income level. To accommodate the housing needs of these projected 226 households, the City will be required to provide an additional 81 affordable units by the year 2000.

7.2.2.4 Housing Overpayment

According to the 1990 census, just over half of Malibu renters are spending more than 30 percent of their gross income on housing. Households that pay a disproportionate amount of their incomes for housing have less money to spend on other essentials, such as food, clothing, and medical care. The federal government defines overpaying as having 80 percent or less than the median income for the county and spending more than 30 percent of gross income on housing.

Cross-tabulation of those spending more than 30 percent of their gross income for housing who are also earning less than 80 percent of the median income is not yet available from the Census for Malibu. Table 7-4 shows gross rent as a percentage of household income for renters who responded to both the income and amount of gross rent questions and Table 7-5 presents the income distribution of the households within the City compared to Los Angeles County. As a result of the City's incorporation after the 1990 Census, it cannot be determined whether or not the 41.3 percent of residents paying 30 percent or more of their income for rent are of low- and moderate-income.

As shown in Table 7-5, the median household income in 1990 was reported at \$81,175. An estimated 14.5 percent of the City's households reported their income below \$25,000; "low income" is defined by HUD as income below \$38,650 for a 4-person household.

The City is likely to be considered a sub-recipient to Los Angeles County for any federal assistance for low- and moderate-income housing. Thus it would qualify for assistance on the basis of the poverty of its residents as compared with all the areas of the County which are not directly receiving assistance; e.g., the City of Los Angeles.

Approximately 15% of the City's households have incomes less than \$25,000/year, versus approximately 35.5% for Los Angeles County as a whole. Therefore, it appears that there is far less over-payment for housing in Malibu than in other areas of the County.

**Table 7-4: Gross Rent as a Percentage of Household Income
(Specified Renter-Occupied Housing Units)**

Gross Rent as a Percent of Household Income	Number of Households		
	Number	Percent	Cumulative
Less than 20 percent	323	31.7	
20 to 24 percent	165	16.2	47.9
25 to 29 percent	35	3.4	
30 to 34 percent	62	6.1	
35 percent or more	359	35.2	
Not computed	75	7.4	41.3
Total	1,019	100	100
Source: U.S. Census, 1990.			

7.2.3 Special Housing Needs

The special housing needs category includes six household types as defined by current planning law. These household types include:

- Farm-workers
- Large Families
- Female Headed Households
- Homeless
- Handicapped
- Elderly

Overcrowded households are similar to large family households and fall within the meaning of the special needs analysis. Table 7-6 displays housing needs by the type of need; not all data pertinent to housing needs was available from the Census data. The following describes the housing needs in Malibu for these six household types, as well as discussion of current "at-risk" housing" in the City.

7.2.3.1 Farm Workers and Day Workers

The farm worker/day worker households in Los Angeles County have needs for affordable housing in both existing and new housing. However, due to the City's development pattern and employment base, the number of households with one or more persons employed as a farmer/day worker or in the agricultural industry is expected to be minimal. Of those types of housing needs that could not be justifiably estimated, it may be assumed that only farm-workers would not find a need for housing in Malibu. Although Malibu does, however, experience a daily influx of day workers, neither day workers or farm workers constitute a measurable demand on the City's existing housing resources.

The City's day laborer center, the Labor Exchange, is based at City Hall. The center provides employment assistance to day-workers. The staff at the center estimates that approximately 40 people per day seek day-labor positions. Although the center's application forms only ask for local residence status and not specific addresses, the center's staff estimates that approximately 20 percent of these workers are homeless (with the balance living in Malibu, Santa Monica, and Los Angeles). The need for assistance is already addressed by existing resources.

Conclusion: There is little active agriculture in the City. As a result, the needs of farm-workers do not differ from the needs of other low-income households. The needs of these farm-workers and day-workers have already been considered among the existing low income households. Further, the demand for programs for the homeless in Malibu does not appear to be substantial. The majority of the homeless in Malibu are served by agencies located in Santa Monica and elsewhere. Therefore, no housing program for farm workers/day workers is necessary for the City.

Table 7-5: Household Income Levels City and County

Income	City of Malibu		County Percent
	Total	Percent	
\$0-5,000	94	2.2	4.8
\$5,000-9,999	106	2.5	8.0
\$10,000-14,999	118	2.7	7.5
\$15,000-24,999	305	7.1	15.2
Sub-Total	623	14.5	35.5
\$25,000-34,999	343	7.9	14.5
\$35,000-49,999	431	10.0	17.3
\$50,000-74,999	640	14.8	17.3
\$75,000-99,999	507	11.7	7.5
\$100,000-149,999	743	17.2	4.8
\$150,000 +	1,031	23.9	3.0
Median	--	\$81,17	\$38,90
Source: U.S. Census, 1990; California State Census Data Center.			

Table 7-6: Housing Needs by Type - 1990, 2000 and 2010

Estimates	1990		2000 ³	2010 ⁴
	Number	Percent	Number	Number
Households (1990) (U.S. Census information, as revised by SCAG)	4,874	100	5,100	5,300
Dwelling Units	5,851	100	6,010	6,220
Year-Round Housing Units	4,723	100	5,100	5,300
Owner Occupied	3,494	74	3,825	3,975
Renter Occupied	1,249	26	1,275	1,325
Households Paying > 25% of Income for Housing	1,212	28		
Owners	756	22		
Renters	456	37		
Overcrowded Households	113	2		
Households in Substandard Units ⁽¹⁾	47	1		
Special Needs Households				
Farm-workers	n/a	n/a		
Day-workers	n/a	n/a		
Large Families	n/a	n/a		
Female Heads of Household	245	4.3		
With Children under 18	191	3.4		
Without Children under 18	54	0.9		
Homeless	25	0.2		
Handicapped	1,164	10.0		
Elderly ⁽²⁾	273	4.8	280	309
Very Low Income	394	7.0	419	459
Low Income	443	7.9	470	524
Moderate and Above Moderate Income (non-elderly)	4,511	80.3	4,841	4,928
Sources: U.S. Census, 1980; U.S. Census, 1990; Los Angeles County; Department of Regional Planning; Harland Bartholomew & Associates Notes: All estimates derived by methodology used to estimate City population. n/a Data not available (1) Substandard units defined as those lacking complete plumbing or kitchen facilities. (2) Householders 65 years and older. (3) Total households and dwelling units projected by SCAG; elderly, very low income, low income and moderate and above moderate income households projected by HBA based on numbers available from SCAG. (4) Includes 2000.				

7.2.3.2 Large Family Households/Overcrowded Households

Large households are defined as those households with five or more persons. In Malibu, these are typically houses on the beach used by several different people, a type of "group housing". Large family households require sufficient space to meet functional housing needs such as enough room for sleeping, studying, and food preparation. A second indicator of this space need is overcrowded households. The typical indicator of overcrowding relates to the number of rooms and persons in a housing unit. Specifically, the Census defines an overcrowded unit as one occupied by 1.01 or more persons per room. Overcrowding reflects the financial inability of households to buy or rent housing units having enough space for their needs. Consequently, overcrowding is more appropriately considered a household characteristic (rather than a housing condition) and falls within the meaning of special housing needs, similar to large families. Table 7-7 shows that approximately 113 units, or 2.4 percent, of the units in Malibu were overcrowded in 1990 compared to 84, or two percent in 1980.

Table 7-7: Overcrowding of Occupied Households 1980 and 1990

Persons per Room	Households	
	1980	1990
1.01 or more	84	113
Percent	2.0%	2.4%
Total Occupied	4,357	4,743
Source: U.S. Census, 1980; U.S. Census, 1990		

Conclusion: Since there was an increase between 1980 and 1990 in the number of units identified as over-crowded in the City, it appears that some households may require assistance to find larger housing units.

7.2.3.3 Female Headed Households

Female-headed households account for 5.7 percent (or 245) of the total households in Malibu as reported by the 1990 Census. Table 7-8 reveals that 1.6 percent of the female-headed households are living below the poverty level. All three households

include children under 18. None of the female-headed households without children are living below the poverty level. This compares to 2.7 percent of the total families with children in the City which had incomes below the poverty level. Female-headed households are, therefore, not any more likely to be living in poverty than the average Malibu household.

Table 7-8: Female-Headed Households (1990)

Type of Household	Above Poverty Level	Below Poverty Level	Total
With Children Under 18	188	3	191
Without Children	54	0	54
Total	242	3	245
Source: U.S. Census, 1990.			

Housing needs of the female headed households include affordability, proximity to services, and access to all housing opportunities. These needs are addressed by the programs included in this Housing Element which seek to reduce housing costs and expand the range of housing opportunities in the City.

Conclusion: No housing problem relating to female-headed households has been identified in the City and no housing program is necessary.

7.2.3.4 Homeless

Legislation signed into law in September 1984 indicates that the "special needs" analysis must include the "homeless" and need for emergency shelter. The "homeless" refers to persons and/or families who are without shelter because of economic and/or domestic circumstances. Such persons and families may live in campers, motels, and other temporary accommodations.

There is no specific data on the homeless population because, homeless people were not accounted for in the Census. Los Angeles County Sheriff Department staff stationed in the area and familiar with the City estimate that there are approximately 25 homeless people living in the undeveloped hillside areas and other vacant or isolated areas of the City.

There are no facilities for the homeless within the City, but the homeless can be found camping in public parks and availing themselves of public rest room facilities. There are however, several facilities which provide temporary shelter, food and social services in Santa Monica, east of Malibu. As part of the preparation of this element, local social service providers, including churches and synagogues and service organizations were contacted. No organization or facility contacted identified an unmet need for housing for the homeless; in fact, the organizations and facilities contacted indicated that there is no measurable demand for housing by the homeless.

(Appendix C of this element provides a list of service providers in the City and in the adjacent area. These facilities were contacted during the preparation of this Housing Element and these providers indicated that the demand of the homeless are currently being met and no homeless person is turned away.)

Conclusion: There is a very small number of homeless identified in the City. In the Malibu area, services to provide support and assistance to the homeless are provided by public and private agencies in Santa Monica. Therefore, given the limited number of homeless and the availability of services, there is no particular need for special programs to serve the homeless in Malibu. However, due to the seriousness of the problem statewide and the uncertainty of whether, as a result of general economic downturns, a need which does not currently exist may arise during the planning period, a program to permit shelters and transitional housing programs is included in the City's five year plan.

7.2.3.5 Handicapped/Disabled

The information on handicapped housing needs is difficult to obtain because the census data is limited to work/transportation related disabilities. The Department of Health and Human Services estimates that 10 percent of the total population in the United States is handicapped. Based on the national figure of 10 percent, Malibu is estimated to have 1,164 handicapped/disabled persons living within the City. Current data on the income and tenure of handicapped households are unavailable.

The Federal Rehabilitation Act of 1973, Section 104.3(j) defines a disabled person as "any individual who has a physical or mental impairment which substantially limits one or more major life activities, has a record of such an impairment, or is regarded as having such an impairment." The housing needs of handicapped households include, but are not limited to:

- Special design features to enhance housing accessibility, and
- Financial housing assistance to bring housing costs within the ability to pay.

The two most prevalent housing needs for persons with disabilities are *accessibility* and *affordability*. Individuals who are mobility impaired usually need housing that can accommodate wheelchairs or have level entry ways and no interior or exterior stairs. Continued application of the City's building code requirements will ensure that accessibility is continued; no further program is necessary.

The State Department of Rehabilitation only represents a portion of the handicapped individuals in any community and does not maintain community specific data. The Department provides vocational rehabilitation to disabled youths and adults. The client base fluctuates and their housing needs vary, depending on the disability. The Department of Rehabilitation suggested the guideline of assuming approximately 10 percent of the population is considered handicapped.

In 1985, the State of California adopted building regulations that required any privately funded development with five or more units of multi-family rental housing to include handicapped adaptability features for all accessible (ground floor) units. Prior to 1989, developers could apply for a hardship exemption if a maximum of \$650 per unit was spent in adapting units for handicapped access. Many developers applied the required funds to only one aspect of accessibility, such as an exterior ramp, but failed to address the interior design of a unit. It has been determined that required interior and exterior modifications cannot be accomplished for \$650 per unit.

In 1992, Title 24 of the California Code of Regulations was amended to repeal the cost cap, and therefore, it is currently more difficult to obtain a hardship exemption. The developer must provide evidence that the handicapped requirements cause the project to become financially infeasible or must provide that the modifications would necessitate the removal of major structural elements. The City's Building Official indicates that no exemption to the state's regulations has been sought since the City's incorporation. The City, as a matter of practice, actively and progressively reviews proposed projects to ensure that developments meet the state's objectives.

7.2.3.6 Elderly

Approximately 11.6 percent, or 1,290 of the residents in Malibu were 65 years of age or older in 1990. However, only an estimated 5.1 percent (209 persons) of all of the City's households are headed by a person 65 years of age or older.

Elderly housing needs include affordability and special design features to accommodate physical disabilities in new and rehabilitated housing. There is a wide spectrum of housing suitable to meet the needs of the elderly given the diversity of this population group and the fact that in the future there will be a larger "older old" group.

The different types of housing for seniors includes private residences as well as senior/adult living/retirement housing developments. Although for many senior citizen housing projects a critical factor is the necessity for having a project size large enough to support the provision of appropriate services, including property management, recreation and other staff services. The most appropriate way to meet the projected need for additional housing for the elderly is not with a large development but through smaller senior developments, mobile home parks, Section 8 vouchers, local rent subsidies and senior home sharing.

7.2.3.7 At-Risk Housing

"At-Risk Housing" refers to housing units that receive federal, state or local assistance to reduce a tenant's housing costs. Based on research of local records, there are no identified at-risk housing units in the City, according to the California Department of Housing and Community Development and the U.S. Department of Housing and Urban Development.

7.2.4 Projected Housing Needs

Under Section 65584(a) of California Planning Law, the Southern California Association of Governments (SCAG) is responsible for determining the projected housing needs for all income levels in every city within Los Angeles County. The projected housing needs must account for the following factors:

- Market demand for housing
- Availability of suitable sites
- Type of tenure and housing needs
- Employment opportunities
- Availability of public services
- Housing needs of farm workers

7.2.4.1 Population

According to 1980 census data (adjusted to reflect the City's boundaries), the estimated population within the current boundaries of the City was 10,172. By 1990, the population had grown to an estimated 11,643 persons, representing a population increase of 1,471 persons over 10 years, a change of 12.6 percent for the decade. The growth rate in Malibu is not rapid as in other newly incorporated cities in Los Angeles County. This slower growth is due in part to the significant environmental constraints (including, but not limited to geology, soils, topography, sensitive habitat, flood-prone areas, and other constraints) facing development in the City. The City is long and narrow set between the Pacific Ocean and the rugged terrain of the Santa Monica Mountains. Additionally, land values in Malibu are higher than in most areas of Los Angeles County which also serves as a deterrent to rapid growth.

An additional element of the community population is the seasonal or part time resident. The City's Wastewater Management Study, completed by Warshall and Associates, Inc. in 1992, accounted for 4,015 single family parcels, 869 to 872 multi-family dwelling units, and 552 mobile homes for a total of approximately 5,436 to 5,439 housing units in full- and part-time use. This study for the City accounted for all developed parcels within the city limits during the study, and surveyed a sample of them during the work. The 1990 Census estimates, based on Block data and counts using aerial photographs, that there were 5,851 dwelling units of which approximately 4,743 were occupied by year-round residents as either owners or renters. Assuming the number of persons per household is the same for these residents as it is for the community as a whole, the City's study estimated that there were 12,940 to 14,465 persons living at least part of the time in Malibu in 1990.

The growth projections prepared by SCAG were based on a combination of cohort and straight line projections and yielded a low growth projection of 13,275 full time residents by the year 2010 and a high growth projection of 14,648 in the same period. If seasonal and part time residents are included, these totals will swell to between 14,143 and 18,809 by the year 2010.

The population projections used in this Housing Element and in the other elements of the General Plan are not used to calculate the City's housing goals. SCAG will prepare the Regional Housing Needs Assessment (RHNA) for the 1996-2000 period. Consistency with the SCAG-generated RHNA is required by California Government Code Section 65583 and 65584.

7.2.4.2 Employment

The Census information on employees and resident employment has not been desegregated for the City. The number of persons working in all four of the Census tracts (10,271 persons) roughly equals the number of employed residents, 10,373. Assuming the working person per household ratio is quite similar for the City as for the region, it appears that jobs and employed residents are in balance.

SCAG uses the balance between jobs and housing, adjusted for expected employment per dwelling unit, as a basis for determining whether or not there is adequate housing for the regional employment. Tentative calculations for the Santa Monica Mountains Sub-Region, of which the City is a part, concluded that the Sub-Region is Housing-Rich.³ This is consistent with the estimates for 1984, when the Santa Monica Mountains Sub-Region had a job/housing ratio of 0.62. SCAG's 1984 Growth Management Plan (GMP) for the Sub-Region established a job/housing balance performance goal of ratio of 0.86 for the growth in the sub-region from 1984 until 2010; that is, in 1984 there was 0.62 "job" for every housing unit and the regional objective was 0.84 "jobs" for every housing unit. Therefore, the Malibu area has an excess of housing units (otherwise referred to as "housing-rich") and a need for employment in the Sub-Region.

SCAG's regional planning efforts recognize that Malibu has unique environmental constraints that makes it unlikely that additional housing will be developed in the City to achieve the sub-region's jobs/housing objective; in fact, SCAG recognizes that the balance maybe borne by other jurisdictions in the sub-region that have a greater likelihood for growth due to fewer significant constraints. For example, other communities have greater public transportation options available for low-income workers. In addition, other jurisdictions in the region do not have the same extensive, and often extreme, environmental constraints such as unstable soils and slopes, exposure to flooding (both ocean-related and hillside-related), wild brush fires, and other significant constraints.

Since the 1984 GMP, Hughes and Pepperdine, among others, have provided significant new employment opportunities in the area included in the four Malibu Census Tracts. The current ratio is estimated to be 1.36 for the subject tracts. However, the ratio of employed residents/household is estimated to be 1.61.

7.2.5 Share of Regional Housing Needs

The two most important sets of data contained in the Regional Housing Needs Statement are regional share and fair share. SCAG has developed these figures to assist local jurisdictions in determining an equitable distribution of housing unit needs and lower income household assistance.

As required by state law and guidelines, the housing element must identify the City's portion of the region's total need for housing units. As previously noted (see Section 7.1.4 of this Housing Element), during preparation of this General Plan, growth projections (including the share of housing and employment) for the Malibu area prepared by the SCAG were made available; the following summarizes the projections prepared by SCAG for the City as part of the preparation of this Housing Element:

	Pop.	Hs'holds.	Increase In Hs'holds.	Dwelling Units (DUs)	Increase in DUs
1990	11,643	4,874	----	5,851	---
2000	12,023	5,100	226	6,010	159
2010	14,254	5,300	200	6,220	210

These projections were based on a combination of cohort and straight line projections, assuming that the persons per household ratio continues to decline as it had over the period between 1980 and 1990.

As discussed earlier, the City has an identified need for additional affordable housing for very low, low and moderate income families. The identified need for the City would normally be prepared by SCAG. However, SCAG's 1989-1994 RHNA was prepared prior to the City's incorporation; further, SCAG has not updated the RHNA for several years due to state budget cutbacks. Therefore, in the absence of RHNA

projections of housing, this Housing Element relies on the same formulas SCAG traditionally uses to calculate RHNA's. Specifically, the City started with the projected number of new households (226) for the year 2000 and determined the following allocation of new housing units based on the household income data from U.S. Census information, using the formula to adjust for avoidance of impact: 11% (25) for very low income families; 12% (27) for low income families; 13% (29) for moderate income families and the remaining 64% (145) for those families above the moderate income level. To accommodate the housing needs of these projected 226 households, the City will require an additional 81 affordable units by the year 2000. This information is shown in the following table:

Income Category	Income Distribution - City of Malibu	Income Distribution - County of Los Angeles	Avoidance of Impact Adjustment	Five-Year Regional Needs by Income Category	Units Built Since March 1991 (Incorporation of City of Malibu)
Very Low Income	10%	15.3%	11.0%	25	-
Low Income	9%	21.9%	12.0%	27	-
Moderate Income	11%	19.2%	13.0%	29	-
Above Moderate Income	70%	43.6%	64.0%	145	88
TOTAL	100%	100%	100%	226	88

In addition, the City and the surrounding area have been identified by SCAG as a "housing rich/job poor area" (that is, the area has a need for additional employment and not a need for additional housing as part of the regional planning efforts to balance jobs and housing as a method to reduce regional commuting patterns).

7.2.6 Energy Conservation Opportunities

Section 65583(a)(7) of the Government Code requires an analysis of opportunities for energy conservation in residential developments. According to the Department of Housing and Community Development:

The purpose of this analysis is to show that the locality has to consider how energy conservation might be achieved in residential development and how energy conservation requirements may contribute to the affordability of units.

Following are examples of local policies, plans, and development standards that have been successful in reducing energy conservation standards:

- *the active, constructive enforcement by local building officials of existing state residential energy conservation standards;*
- *standards for street width, landscaping of streets and parking lots to reduce heat loss or provide shade; and*
- *standards for energy efficient retrofit to be met prior to resale of homes.*

Many residents of Malibu do not have regular working hours and, in fact, many residents work either out of their homes ("telecommuting" to work). Telecommuting provides several tangible benefits, including reducing traffic on the City's constrained circulation system and reducing emission of vehicle-emissions.

The City enforces Title 24 of the State Building Code which establishes energy standards. However, energy costs do continue to rise, resulting in the rise of operating cost of a housing units in direct proportion to its energy requirements. In a mild climate such as Malibu, energy costs are lower than those in places such as desert or mountain climates, however energy costs can still add substantially to the cost of housing. Reducing the need for energy resources on a per unit basis will have a long-term effect of lowering the operating cost of housing and decreasing the energy needs of the City. The City's General Plan (Conservation Element and Land Use Element) include specific goals, objectives and policies to encourage energy conservation.

While activities during construction expend different forms of energy, the greatest amount of energy consumption is in natural gas and electricity used to maintain the individual housing units. There are several opportunities for energy conservation both during and after construction. Mechanical systems and maintenance practices may be improved to decrease energy costs. Building orientation and shapes, landscaping, glazing, surface materials, and insulation can be designed to minimize the energy requirements of structures.

7.3 Inventory of Resources and Constraints

This section provides an analysis of resources and constraints which affect the City's ability to respond to the

challenge of meeting unmet housing needs. Information on the following resources and constraints is presented in this section:

- Housing Supply Characteristics;
- Assessment of Land Suitable for Residential Development;
- Inventory of Non Governmental; and,
- Inventory of Governmental Constraints.

7.3.1 Housing Supply Characteristics

7.3.1.1 Residential Development Trends

Residential development in Malibu is located along both sides of Pacific Coast Highway and in the canyons and hillsides. Residential development patterns are, like the City, linear.

In 1990, the Census estimated approximately 7,543 units in the four Census Tracts and, based on desegregated numbers, approximately 5,851 of these are within the City limits. This reflects an approximate 16 percent increase between 1980 and 1990 which is similar to the population growth rate for the same period. It may be concluded that the growth rates of full-time and part-time residents are roughly equal. The current estimate, based on data from the California Department of Finance, indicates that there were 5,746 housing units in Malibu in 1993, an increase of 2.2% since 1990.

The number of full-time resident households increased in 1990 to 4,318 from 3,668 in 1980, reflecting a growth rate of 17.7 percent. This growth rate is higher than the population growth rate for the same period, because the number of persons per household declined from 2.77 persons per household in 1980 to 2.57 in 1990. Assuming the population per household continues to decline as it has, it can be projected that, by the year 2010, there could be as few as 2.22 persons per household. The Malibu Board of Realtors estimates that there are approximately 1,362 vacant, subdivided parcels within the City; see Table 7-11 in Section 7.3.1.2) The Board has not provided information on the location of these subdivided lots, so it is not known whether or not their locations would meet the requirements of the Land Use Element which in turn reflect environmental and other safety constraints to development. SCAG's projection for future growth in the City indicate the total number of households of 5,100 in the year 2000 and 5,300 in the year 2010.

7.3.1.2 Status of Current Residential Development

Vacant land accounts for the majority of the land within the City. Residential uses and single family units in particular account for the majority of the built environment. Existing residential land uses cover 2,207 acres or 18% of the land in the City as shown in Table 7-10.

◆ **Single Family:** The single family residential category includes, low density (more than two units per acre) and more rural densities (less than two units per acre) uses. The lower density single-family development is more dominant than higher density development. Higher densities are generally found along the beaches while low density development is in the hillsides and canyon areas of the City.

Single family homes sit on lots ranging from small clusters of approximately 10,000 square feet up to large parcels of 40 acres or more. Single family homes dominate both the coastline and the canyons and hillsides from the City boundary on the east to approximately one mile west of Carbon Canyon Road. Residential neighborhoods are found along canyons such as Big Rock, Las Flores, Rambla Pacifico and Carbon Canyon.

Table 7-10: Existing Residential Land Use Acreage in Malibu

Land Use	Acreage	Percent of Land Use Type
Single family	2,429.9	89.8
Multi-family	175.3	6.5
Mobile homes	101.8	3.7
Total Residential Acreage	2,207.0	100.0
Sources: County of Los Angeles Regional Planning Department; City of Malibu General Plan Task Force; Harland Bartholomew & Associates, 1992.		

Between Carbon Canyon and Puerco Canyon, there are concentrations of single family homes interspersed with other types of development. These residential neighborhoods are primarily located along the beach (including Malibu Colony), in the hills above the Civic Center and adjacent to Pepperdine University. With the exception of the Civic Center, there is limited residential development on the north side of Pacific Coast Highway in this area, with a very small amount of development

located near Puerco Canyon. The area located between Latigo Canyon and the western city limits is characterized by relatively rural and low density single family homes on both sides of Pacific Coast Highway extending into the hillsides. The largest concentration of residential neighborhoods is in the Point Dume area and the Malibu Park area, north of Pacific Coast Highway and Zuma Beach. Residential development occupies the majority of land along the coast between Malibu Park and the western boundary of the City.

Rural residential refers to homes located in a rural setting including backyard animal shelters, corrals, or pens for non-commercial horses or livestock. Rural residential development contains both high and low density rural residential properties. Several rural residential neighborhoods exist in Malibu. The majority of the low density rural residential neighborhoods are located in the hillsides between Corral Canyon, Latigo Canyon and Ramirez Canyon. Higher density areas are located seaward of Pacific Coast Highway and Corral Canyon Road. In addition to the rural residential development of Point Dume and Malibu Park, several pockets of rural residential neighborhoods are also found just west of Trancas Canyon and along Decker Canyon. In addition, there is one area located at the east end of the City adjacent to the northern City boundary along Carbon Canyon Road.

◆ **Multiple Family:** Multi-family residential uses are developed on 175.3 acres (6.5 percent of all residential is multi-family). This category includes: duplexes, triplexes and two or three unit townhouses and condominiums (attached units); low-rise apartments, condominiums or townhouses, between one and two stories in height with 10-18 units per acres (either a single structure or group of structures of four or more units in a complex with common grounds); and, medium-rise apartments or condominiums, between three and four stories in height with more than 18 units per acre (either a single structure or group of structures of four or more units in a complex with common grounds).

The majority of multi-family units in the City are low rise apartments, condominiums or townhouses. There are two areas of duplex or triplex type units; one is located along the coast between Big Rock Drive and Las Flores Canyon Drive, and the second is located in Point Dume on Dume Drive. The only area which contains medium-rise apartments is located north of Pacific Coast Highway just west of Kanan Dume Drive.

The largest concentration of multi-family residential is located in the westerly areas of the Civic Center on both the north and south sides of Pacific Coast Highway. There are a few pockets of multi-family development scattered east of this area around Las Flores Canyon and between Puerco Canyon and Latigo Canyon south of Pacific Coast Highway. In the Point Dume area there are multi-family residential units located both north and south of Pacific Coast Highway. The only remaining two areas of multi-family development are located along Trancas Canyon and immediately west.

◆ **Mobilehomes:** This category includes mobilehomes, trailers and pre-fabricated housing which are either stationary with foundations or are capable of being moved. There are two mobile home parks in Malibu which account for 101.8 acres or three percent of all residential development. The two parks are both located south of Pacific Coast Highway. The first is the Paradise Cove Mobilehome Park, located just east of Point Dume and the second is the Point Dume Club Mobilehome Park.

7.3.2 Assessment of Land Suitable for Residential Development

In October 1987, an interpretation of the State Attorney General added insight on how regional councils of government, such as SCAG, must determine a locality's share of regional housing need. The question posed to the Attorney General by Senator Roberti was as follows: *"Must the availability of suitable housing sites be considered based upon the existing zoning ordinances and land use restrictions of the locality or based upon the potential for increased residential development under alternative zoning ordinances and land use restrictions?"*

California Attorney General John Van De Kamps' opinion on September 29, 1987 in regard to this important question was as follows:

"We find no indication in Section 65584 that current zoning ordinances and land use restrictions are to limit the factor of "the availability of suitable sites." A housing site would be unsuitable based upon its physical characteristics, not because of some governmental control of an artificial and external nature. The planning process of Sections 65583 and 65584 contemplates an identification of adequate sites that could be made available through different policies and development standards. Existing zoning policies would be only one aspect of the "available data" upon which the factor of the "the availability of suitable sites" is to be considered under Section 65584. . . . We conclude that a council of governments must consider the availability of suitable housing sites based not only upon the existing zoning ordinances and land use restrictions of the locality but also based upon the potential for increased residential development under alternative zoning ordinances and land use restrictions when determining a locality's share of the regional housing needs."

The primary constraints to the production of housing units in Malibu in the long-run are the significant environmental constraints (geology, topography, flood-areas, significant habitat, and other factors), the lack of infrastructure, the cost of vacant land, and the cost to construct affordable housing on land that has demonstrated significant environmental and physical constraints. Of the vacant land in the City, one or more of these constraints is present. The majority of new housing development that has occurred in the City in recent years has either been on infill land or been the development of large single-family homes on relatively large parcels of land.

Estimates of vacant land using an updated version of the Los Angeles County land use inventory map of Malibu, show that, within Malibu, vacant land accounts for over half of the incorporated area. Information gathered for the Safety Element reveals that the vast majority of this land may be subject to some form of geologic or hydrologic hazard and will, therefore, require further study prior to approval of plans for new construction.

Vacant residential and commercial land is tracked by the Malibu Board of Realtors. The Board provided an inventory of vacant parcels to the General Plan Task Force on February 18, 1992. Table 7-11 details this inventory. Although the inventory does not take into account whether or not the parcels are properly located with respect to the services to be provided by the City and with respect to the physical constraints of the land, the inventory does indicate that there are nearly 1,400 vacant parcels in the City, including 288 parcels less than 1/4 acre in size and an additional 126 parcels between 1/4 and 1/2 acre in size. Thus further analysis will be necessary to determine which parcels would be suitable for further development.

As required by the state's General Plan law and requirements, Figure 7-2 identifies areas which may be suitable for development of mixed use and multi-family housing. Table 7-12 tabulates existing and proposed land uses. The City has designated for residential development sufficient land to accommodate the 81 affordable housing units needed in the City by the year 2000.

Table 7-11: Residential Development Opportunities

Parcel Size	Number of Parcels	Percent of Vacant Parcels
Less than 1/4 Acre*	288	21.1%
1/4 - 1/2 Acre	126	9.3%
1/2 - 3/4 Acre	95	6.9%
1 Acre	96	7.0%
1-2 Acres	198	14.3%
2-5 Acres	233	17.1%
5-10 Acres	60	4.4%
Over 10 Acres	46	3.3%
Parcel Size Unknown	274	20.1%
TOTAL	1,362	100%
* Includes 119 parcels which are separate tax parcels but are not necessarily planned for individual development. In addition, the legal status of a parcel does not indicate that the parcel may be developed pursuant to the City's General Plan and zoning ordinance.		
Sources: Malibu Board of Realtors, 2/18/92; Harland Bartholomew and Associates, 1992.		

**Table 7-12:
City of Malibu - Potential Residential Units - Summary**

Land Use Designation	Vacant Land		Mixed Use		TOTAL	
	Acres	Potential Number of Housing Units	Acres	Potential Number of Housing Units	Acres	Potential Number of Housing Units ²
SF-M (2-4 du/acre)	143	572	NA	-	143	272
SF-L (1-2 du/acre)	110	220	NA	-	110	220
RR1 (1 du/acre)	254	254	NA	-	254	254
RR2 (2 du/2 acres)	1,733	866	NA	-	1,733	866
RR5 (1 du/5 acres)	1,414	282	NA	-	1,414	282
RR10 1 du/10 acres)	368	37	NA	-	368	37
RR20 1 du/20 acres)	1,820	91	NA	-	1,820	91
MF (6 du/acre)	12	72	NA	-	12	72
MFBF (1,855 sq. ft./unit)	1	15	NA	-	1	15
MH (1 du/acre)	0	-	NA	-	0	0
Commercial (CG)	NA	-	34	136	34	136
TOTAL	5,855	2,394	34	136	5,889	2,530

2

Yields are based on 100% of allowable density. Given topographical and safety concerns (geology, flood plain, etc.) actual yield is expected to be about 50% of allowable density.

**Insert
Figure H-2**

Table 1
 Comparison of the results of the two methods for the determination of the concentration of the substance in the sample

Sample No.	Method 1		Method 2		Relative Error (%)
	Conc. (mg/L)	Conc. (mg/L)	Conc. (mg/L)	Conc. (mg/L)	
1	100	100	100	100	0
2	200	200	200	200	0
3	300	300	300	300	0
4	400	400	400	400	0
5	500	500	500	500	0
6	600	600	600	600	0
7	700	700	700	700	0
8	800	800	800	800	0
9	900	900	900	900	0
10	1000	1000	1000	1000	0
11	1100	1100	1100	1100	0
12	1200	1200	1200	1200	0
13	1300	1300	1300	1300	0
14	1400	1400	1400	1400	0
15	1500	1500	1500	1500	0
16	1600	1600	1600	1600	0
17	1700	1700	1700	1700	0
18	1800	1800	1800	1800	0
19	1900	1900	1900	1900	0
20	2000	2000	2000	2000	0

NOTE: The results of the two methods for the determination of the concentration of the substance in the sample are compared. The results of the two methods are compared for the determination of the concentration of the substance in the sample.

Table 7-13
Summary of Five-Year Housing Goals

Housing Goal	Housing Unit by Income Category				TOTAL NUMBER OF HOUSING UNITS*
	Very Low	Low	Moderate	Above Moderate	
Housing Construction (Regional Housing Needs)	25	27	29	145	226
Housing Rehabilitation	5	6	6	30	47
Housing Conservation (Section 8; mobilehome parks)	62	68	74	363	567
TOTAL	92	101	109	538	840

*These objectives are for the remainder of the current planning period (through June 1996) and the next planning period (through June 2001). The City hopes to achieve 2% of its objectives by the end of the current planning period. Because there are only seven months left in the planning period and most of the City's programs will require enabling legislation or staff work, it is unlikely that the City could accomplish more than 2% of its objectives.

7.3.3 Inventory of Non-Governmental Constraints

Several factors pose constraints to the provision of affordable and adequate housing. They are divided into several governmental and non-governmental constraints. Governmental constraints are deliberately imposed and, thus, would seem to be easier to mitigate. However, the vast majority of governmental regulations are essential to the health, safety, and general welfare of the community. Non-government constraints, on the other hand, are existing conditions that are brought about by interdependent natural and socioeconomic forces, which cannot easily be removed.

Non-governmental constraints are factors that negatively affect the provision of housing. In Malibu, these include the physical, natural and economic aspects of location and construction of development which limit the number, type, and location of residential projects and largely determine the costs/prices of housing units. Non-government constraints include, environmental constraints and market forces

7.3.3.1 Environmental Constraints

Malibu is located within the Santa Monica Mountains which are characterized by steep and rugged hillsides and valleys and canyons draining into the Pacific Ocean. In the Malibu area, the natural environment substantially influences housing location. Some of the hillsides and canyons have slopes that make housing construction more expensive or impossible. Hillsides and steep slopes are a common constraint in Malibu. More than eighty-percent of Malibu is hillside area; the remaining relatively flat land is either subject to ocean and/or canyon (creek) flooding, or other significant environmental constraints.

Seismic characteristics pose a potential development constraint in Malibu due to the numerous faults surrounding the area, including the Malibu Coast Fault, the Santa Monica Fault, the Las Flores reverse fault, and the Anacapa Fault which traverse the City. Development in a fault zone is possible, but it is generally discouraged as this seismic hazard represents an unnecessary risk for most development.

Lands that fall within flood plains are generally regulated to prevent the potential loss of life and property. In the Malibu area, the Federal Emergency Management Agency (FEMA) has recorded eight major flooding incidents since 1934. FEMA has identified 24 flooding sources, including creeks and low-lying beach front areas in the Malibu area. Flooding hazards associated with high tides and large ocean waves are also reported by FEMA. Rough seas occurring in conjunction with heavy rains have caused extensive damage along the Malibu coast including the disruption, exposure, or complete wash-out of septic tank systems. Lands located near flooding sources are considered a moderate to high constraint on development.

A more detailed discussion of the biota of Malibu and a map of the Resource Protection Areas (RPAs) may be found with the Conservation Element of the General Plan. These areas contain vegetation and wildlife which are considered endangered, rare or significant resources. Development is not necessarily prohibited within RPAs, however, intensive urban development is not appropriate.

In most locations in Malibu, the beaches are relatively narrow. Starting in the 20th century, the sandy beaches in Malibu were backed by slowly-eroding seacliffs. Currently 60 percent of the seacliffs are protected against wave-caused erosion. There are two stretches of the coast which remain backed by unprotected seacliffs and will continue to experience seacliff retreat. One of these areas is between Escondido Beach and Point Dume, the second is between Lechuza Point and Sequit Point. There are some seawalls and revetments in these areas which protect private property.

Since 1938, the shoreline along most of the Malibu coast has advanced slightly at an average rate of 0.5 feet per year. The Malibu shoreline was, however, relatively stable in comparison to other beaches between 1938 and 1988. There are some

beaches in the City which experienced coastal retreat while others experienced beach advancement. The rate of greatest retreat occurred at Malibu Beach where it averaged approximately one foot per year. The beach advanced most significantly at Zuma and Westward beaches at a rate of approximately two feet per year.

Other development constraints include land slides, soil erosion, fire hazard, and liquefaction potential. Erosion and fire potential factors are largely a direct function of slope gradient. Damaging effects from liquefaction may be minimized through adherence to existing code requirements regarding foundation design. A full discussion of the physical constraints to development may be found in the Safety Element of the General Plan.

MORE SPECIFIC ENVIRONMENTAL AND INFRASTRUCTURE CONSTRAINTS

The opportunity for development of high density lower priced residential units is limited because Malibu is exposed to a variety of environmental constraints. Malibu is subject to geologic hazards such as slope instability, landsliding, and unstable ground; flood and inundation hazards such as tsunami, seiche, and storm induced flooding; and wildland and urban fire hazards. Large portions of the City are covered with hillsides and steep slopes. More than eighty percent of Malibu is a hillside area. In addition, inadequate infrastructure may also act as a constraint to residential development.

Much of Malibu remains undeveloped as a result of constraints posed by the natural environment. Slope instability, including landslides, mud and debris flows, and soil creep, are a common occurrence in hillside areas. Expansive soils, compressible or collapsible soils, high groundwater and shoreline regression are additional geologic/geotechnical hazards which occur throughout the City. Each of these geologic/geotechnical and safety hazards is a constant threat to the property and health of residents in Malibu within and surrounding the areas where they exist.

Hillsides/Slopes

Much of the City is comprised of rugged mountainous terrain within the Santa Monica Mountains. The mountainous coastal areas are characterized by steep hillsides that descend abruptly into narrow canyons. The majority of the area can be classed as having an average gradient of 35% and above. This gradient class is generally accepted as being not economically feasible for high density urban development. Development on such severely sloped parcels would require substantial modification to the natural terrain which significantly adds to the cost of development. Development on the steep hillsides would also add to erosion and landslide potential.

Geologic Hazards

Landslides:

The 1990 Los Angeles County Safety Element (LACSE) prepared a map that was a generalized inventory of landslides. Review of the Los Angeles County Landslide Inventory map indicates that the Malibu area, and the Santa Monica Mountains area in general, constitute one of the three areas of LA County that display a high propensity for landsliding.

According to the 1992 review of landslides conducted by Philip Williams & Associates and Peter Warshall & Associates there are approximately 250 mapped landslides in the area. Of the major slides listed in the Williams and Warshall report, sizes range from about eight acres up to the Big Rock Mesa landslide which is about 220 acres. Most of the large landslide areas involve housing units. Many of these are threatened. Public utilities have been affected, particularly those underground. To address the problem, underground piping has often been rerouted onto the ground surface with flexible connections.

The generally recognized landslide areas in Malibu include (listed from east to west):

- Las Tunas Beach Slides;
- Eagle Pass-Las Flores Slide;
- Calle Del Barco;
- Carbon Canyon Slide;
- Puerco Beach Slides;
- Latigo Shore Slide;
- Malibu Cove Colony Slides;
- Big Rock Mesa;
- Rambla Pacifico;
- Carbon Mesa Slides;
- Amarillo Beach Slides;
- RV Park Slide;
- Latigo Canyon Slide;
- Lower Encinal Canyon Slides;
- LaChusa Highlands Slide.

Debris Flow/Mud Flow Hazards:

Debris flow hazard can be a dangerous and deadly hazard that destroys property and endangers public health and safety. The major canyon bottoms would be the collection point for mud, water, and debris from all the uphill ravines in Malibu. Many of these canyon bottoms have been traversed by roadways which act as the points of ingress and egress from developed uphill areas. During a major storm flooding event, these roads would be hazardous and would stand the risk of being impacted by a sudden debris flow event and would close off the communities above. Geologic hazard maps completed as part of the General Plan have delineated the highland areas above Malibu with the most likely potential for generating future debris flow events. The major canyon bottoms most exposed are Topanga Canyon, Las Flores Canyon, Malibu Creek, Puerco Canon, Corral Canyon, Dry Canyon, Solstice Canyon, Latigo Canyon, Escondido Canyon, Ramirez Canyon, Zuma Canyon, and Trancas Canyon.

Mudslides that can contribute to the debris dangers downstream are often initiated from private properties where development has occurred and surface drainage has not been well controlled. Another situation where incidences of mudsliding can occur is where private roadway surface drainage is not well maintained, or properly disposed. There are many sites within Malibu where canyon and sidehill private roadways allow water to flow over a hillside and these will be areas where mudslides will have a high potential of occurring during a major storm.

Mudsliding is also possible on steep slopes where construction has been allowed to cut into the hillside and undermine the soil and weathered bedrock horizon. There have been past failures of hillsides along the north side of Pacific Coast Highway which is the main arterial into and out of the City. The potential for mudslides and debris flows increase significantly following a major fire. The debris flow potential due to burned areas is a major potential hazard to Malibu's lowland and canyon development. And because the highland areas of Malibu are located in a high fire hazard area, there is a high potential for experiencing large burn areas that will expose the soils to high erosion potential.

Liquefaction and Subsidence:

Few areas of significant liquefaction susceptibility exist in the City of Malibu. These areas are located along the beaches and in the flood plains of the major streams, such as Malibu Creek.

Of the various geologic hazards that affect the State of California, expansive soils have caused millions of dollars in damages, particularly to single family residences and private property improvements. Expansive soils of moderate to high expansive potential are spread throughout Malibu. Specifics on possible private, or public damages, would be most available through site specific reports of geotechnical consultants. Based upon the wide variety of individuals who assess, design, and construct property improvements in Malibu, it is certain that distress to foundations, concrete slabs-on-grade, and roadways have been suffered in Malibu. Each of the different geologic formations mapped in the Malibu area consists of various units which may possess expansive potential.

Potential collapsible soils may exist in areas of Malibu where geologic units of alluvium or colluvium are present at the lower end of sloping terrain where it begins to flatten and become less steep, but particularly where debris flow deposits have been recognized. Old deposits from debris flows have been mapped in the Point Dume-Zuma Beach area. Similar types of deposits are likely along Las Flores Canyon, Malibu Creek, Zuma Canyon, and Trancas Canyon. Compressible soils would be very likely in the Malibu Lagoon area, along Malibu Creek, Dume Canyon, and Trancas Canyon. Undetected, development on these type of soils may become distressed as a result of collapse or consolidation of the foundation soils.

Faulting and Seismicity

There are numerous faults surrounding and traversing the Malibu area, including the Malibu Coast Fault, the Santa Monica Fault, the Las Flores Reverse Fault, and the Anacapa Fault. These faults are not well defined as they are not generally visible on the surface. Maps provided in the Background report to Safety Element of the General Plan delineate a 1,000-foot area on either side of all faults as areas which could be subject to seismic hazard.

The Malibu Coast fault zone runs in an east-west orientation onshore subparallel to and along the shoreline for a linear distance of about 17 miles through the Malibu City limits, but which also extends offshore to the east and west for a total length exceeding perhaps 37.5 miles. Onshore, this fault extends from Sequit Point in the west to Carbon Beach in the east although recent mapping suggests that the Las Flores thrust fault may conceivably represent an onshore extension of this fault zone, thus pushing its onshore eastern limits to the Big Rock/Las Tunas beach areas.

The Anacapa or Dume fault is a near-vertical offshore escarpment exceeding 600 meters locally, with a total length exceeding 62 miles. It occurs as close as 3.6 miles offshore south of Malibu at its western end, but trends northeast where it apparently merges with the offshore segment(s) of the Santa Monica Fault Zone, thus lying as close as two miles south of the Malibu Beach/Carbon Beach area.

Tsunamis and Seiches

Tsunamis, seismic sea waves, can be expected rarely from distant sources, but may be generated immediately offshore of Malibu by surface ground rupture of the faulting just offshore, or by the occurrence of submarine landslides immediately offshore. Displacement of the sea floor could generate a local wave and would include wave runup to elevations 12 feet above Mean Lower Low Water of the Pacific Ocean in this area. The runup heights for the Malibu coast in general are between five and seven feet for the 100-year zone and between eight and 12 feet for the 500-year zone. The higher runups occur in the eastern part of Malibu because of the amplification effects related to the Santa Monica Bay resonant oscillations.

Most of the coastal dwellings and low lying coastal areas can expect to be damaged some time in the future by an earthquake generated tsunami. Damage due to flooding in the Malibu Civic Center area can be expected. The most vulnerable objects would be people on the beaches, houses or other buildings constructed on or near the beach, and bridges over the streams near the beach, such as along the Pacific Coast Highway at Malibu Creek and Corral Creek.

Fire Hazards

The City of Malibu is served by the Los Angeles County Fire Department, as well as the California Department of Forestry, if needed. According to the California Department of Forestry and the County Fire Department, Malibu is considered to be an extreme fire hazard zone. Wildland fires are inevitable and are a part of the natural regeneration cycle of the native California landscape. The majority of the City has experienced major brush fires in the past 10 to 30 years, the most recent fire being the Old Topanga/Malibu Fire of November 2-5, 1993. This fire resulted in the destruction and damage of approximately 270 homes in the City.

Infrastructure

Pacific Coast Highway (PCH) is a four lane state highway traversing the city from east to west and is the only major arterial within the city. It serves mostly commuters during the weekday peak hours. A significant portion of commuters access PCH from various canyon roads from western L.A. County and Ventura County. In the summer months PCH also serves as a main access route to the beaches along the coast. This results in significant delays on PCH. Major rock falls or landslides also have the potential to block PCH for extended periods and isolate the community from essential services. Accidents and filming activities further reduce the capacity of the roadway segments along PCH.

There are no sewer lines in place in the city. The community is currently served by individual septic tanks and small package treatment plants. Lack of a sewer constrains the amount of development that the City can accommodate. However, because of the hilly landscape and landslide potential, on-site systems are a better solution for sewage treatment than a community sewer.

Noise

The majority of vacant developable parcels are located along PCH. Parcels along PCH are exposed to noise levels of 65 CNEL and above. Both the Department of Housing and Urban Development (HUD) and State Department of California have established mandatory noise guidelines for residential construction. New residential development cannot be exposed to outdoor ambient noise levels in excess of 65 dBA (CNEL or Ldn), and sufficient insulation must be provided to reduce interior ambient levels to 45 dBA. Parcels along PCH do not meet these noise criteria and are not suitable for large scale residential development.

7.3.3.2 Market Forces

Four aspects of market forces determine the cost of housing construction in Malibu: (1) land costs; (2) labor costs; (3) construction costs; and (4) financing rates. The natural resources and location of the City has made Malibu a desirable place to live. Much of the buildable land in Malibu has already been developed. The demand for land in Malibu has, therefore made land prices considerably more expensive than in the rest of Los Angeles County. Land prices for 1992 were estimated through a limited survey of advertised lots and acreage for sale.⁵ The price of the land depends on the size, number of potentially developable lots, and the location. Land located in the more developed areas generally costs less than the more rural land, with the exception of beachfront property which is typically some of the most desirable and therefore expensive land.⁶ Residential lots and acreage in the City range in price from \$186,000 to \$4,500,000 with a median price of \$938,685. These values are significantly higher than land nearer the City of Los Angeles or other more remote areas of Los Angeles County.

◆ **Housing Value:** Housing in Malibu is considerably more expensive than the California average. In 1980, the median Malibu home value was over \$200,000. In 1990, this increased to \$500,001 as compared to the Los Angeles County median of \$226,400 and the State of California median of \$195,500. The majority of homes in the Malibu area fall into the over \$300,000 category, reflecting, in part, the high cost of land in the Malibu area.

Housing prices for 1992 were estimated through a limited survey of advertised housing units for sale.⁷ Single family homes, condominiums and mobile homes were the typical type of housing unit advertised. Single family homes with three and four bedrooms, two bedroom condominiums and two bedroom mobile homes were the most common types of units advertised. The average price of a three or four bedroom home in Malibu ranges from \$499,000 to \$4,200,000 depending on the size with an average price of \$1,193,881 for a three bedroom and \$1,670,205 for a four bedroom. The price for a condominium with two bedrooms ranges from \$180,000 to \$985,000 with an average price of \$404,250. Two bedroom mobile homes in Malibu can be purchased for as low as \$68,500 to as high as \$475,000 with an average price of \$184,954.

◆ **Rental Costs:** The median rent in the City was over \$1,001 per month as reported in the 1990 Census. This amount was 76 percent higher than the Los Angeles County median of \$570 per month and 78 percent higher than the California median rent of \$561 per month.

Rental costs for 1992 were estimated through a limited survey of advertised rental housing units.⁸ This survey showed that unfurnished apartments, condos and townhouses rent for \$500 to \$3,500 per month depending on the size of the unit. Unfurnished two-bedroom and three-bedroom condominiums and townhouses are the most common rental units. Studio units rented for \$500 to \$895 a month with a median rent of \$682 per month. The rent for one bedroom units range from \$875 to \$3,395 a month with a median monthly rent of \$1,431. The two bedroom units rent for \$1,100-\$3,500 with a median rent of \$1,812. The monthly rent on three bedroom units ranges from \$1,400 to \$3,200 per month. The average monthly rent is \$1,924, approximately \$100 more than two bedroom units.

Rental units in Malibu also include guest houses and single family homes; "second units" (or guest houses) are allowed in all residential zones. Guest houses advertised in the local newspapers range in rent from \$585 to \$1,995 per month depending on the size. The most common advertised guest houses have one bedroom and an average monthly rent of \$1,059. Local residents report that many of these units are not allowed by zoning, so are not advertised. In more affluent communities the more affordable of these units can rent without advertisement, so it is likely that the market is larger and more economical than it would appear in the local newspaper advertisements.

The most common single family rental units are three and four bedrooms. The monthly rent for these units commonly ranges from \$2,100 to as much as \$35,000. While offerings in the higher figure are relatively common, it is unclear whether this is a monthly, seasonal, or annual rental cost. The average monthly rent for three bedroom homes under \$5,000 a month is \$2,748 and the average monthly rent for four bedroom homes under \$5,000 a month is \$3,500.

◆ **Labor and Construction Costs:** Labor costs have risen due to inflation as a result of unionization of construction. The gradual shift from on-site work towards off-site work has helped decrease total labor costs. Nonunion off-site labor and day laborers have alleviated the otherwise steadily rising labor costs.

Construction costs have risen 10 percent for the past decade. The bulk of this increase has been the result of rising energy costs. Not only have the production costs of lumber, concrete, metals, and other finished goods increased, but shipping costs have risen as well. Construction costs can be reduced by low-interest rate loans

◆ **Land Costs:** Land in the City ranges in cost per acre depending on the size of the lot, its location in the City, the availability of infrastructure, amount of slope, and environmental/geological constraint. The following provides generalized information on the cost of land in the City:

1. Lot prices (without dwelling units) range in general from approximately \$150,000 to \$2,000,000 per lot. A general price per acre cannot be determined because each lot within the City is unique based on the factors listed above and explained below.
2. The most important factor in determining the value of the land is its location. If all other factors are equal, the following is true:
 - a) Beachfront property is the most expensive;
 - b) Ocean view property approximately ½ mile up from Pacific Coast Highway (far enough to be shielded from traffic generated noise, but easily accessible from Pacific Coast Highway) is the next most expensive.
 - c) Land cost per acre are less for properties which have the following characteristics (not necessarily limited to these):
 - farther distance from Pacific Coast Highway (difficult access);
 - lack of ocean views;
 - adjacent to Pacific Coast Highway, but on the landside.
3. The size of the lot is not necessarily as important as the useability of the lot in determining the value. For example, if the location and all other factors are the same, a one (1) acre lot which is 100 percent useable is generally more expensive than a four (4) acre lot, of which only ½ acres is useable.

Therefore, a 40 acre lot located within the one of the canyons and without ocean view may cost far less than a ½-acre beachfront lot. Recent properties listed by real estate agencies within the City include a 40 acre property without views, (with 60 percent of the lot usable for \$495,000. This is compared to a 1.7 acre property with panoramic ocean views listed for \$1,444,000.

◆ **Financing:** Financing costs for construction and mortgage loans are important in determining the availability of and demand for new housing. Fluctuating and lower interest rates are encouraging potential buyers to purchase new homes. Current financing rates for southland homes for conforming (\$0 to \$203,150) and jumbo (\$203,150 +) loans for a 30-year fixed VA/FHA loan and an adjustable loan are presented in Table 7-13.

Table 7-14: Conforming and Jumbo Loans

Loan Type	Rates	Points
Conventional (\$0-\$203,150) Loans		
	8.375	2
30-Year Fixed Loan	8.5	1
	8.75	0
Adjustable Loan (annual)	5.5	1
	6.25	0
Jumbo (\$203,150 +) Loans		
30-Year Fixed Loan	8.625	1
	8.875	0
Adjustable Loan (annual)	6.875	1
	6.25	0
Source: CitiBank, July 1994.		

In general, interest rates are higher for "jumbo loans" (loans greater than \$203,150); while the rates have fluctuated dramatically over the past couple of years, it is likely that the rates will remain with the same range as they have for the past two to three years. In general, the costs of financing are less than 10% of the total cost of most affordable housing projects.

7.3.3.3 Access to Public Facilities and Services

Public facilities may be a constraint in two different ways. First, they can limit housing development on land adjacent to existing public facilities. Within the City, roads, schools and utilities are constraints. For example, many of the City's roads are narrow, winding mountain or hillside roads that cannot be widened without creating significant environmental impacts (including loss of unique and sensitive native vegetation and disturbance of wildlife habitat). Therefore, there are no significant opportunities to increase access to public facilities for low-income or very low-income families that need to rely on public roads for convenient and safe access.

Second, housing must be provided with basic services (streets, water, some type of sewage disposal). All housing developments need adequate facilities to provide for water, waste disposal, electricity, natural gas, schools, parks, and fire and police protection services. Land use and zoning controls ensure that residential developments have access to adequate public facilities. The provisions of roads and police protection are responsibilities of the City. Water services and fire protection are provided by independent districts.

The following is a summary of public facilities and services in the City:

Transit: The City is currently served by the Los Angeles County Metropolitan Transportation Authority (MTA), which operates an intercity express bus route from Los Angeles to Trancas Canyon Road. Para-transit services are also provided in the City. These services are operated by BlueTrans under contract with the County.

Fire Protection: The Los Angeles County Fire Department provides fire protection service to the City. Currently, there are seven fire stations serving the Malibu area. There are a total of seven engine companies which are staffed with 22 fire fighters each shift. The adequacy of fire protection services is assessed according to standards of response distance from a fire station. The distance standards vary according to the type and intensity of residences.

Police Services: The City is served by the Los Angeles County Sheriff's Department. The sheriff operates a station in the Lost Hills area north of the City; in September, 1991 the County closed the station in the Civic Center. Police protection in the City is hampered by the length of the City and its relatively low density. The secluded orientations of many residential neighborhoods provide little or no opportunity for regular visual inspection from major arterial roadways.

Schools: The elementary schools and middle/high school district in Malibu are served by the joint Santa Monica/Malibu Unified School District, an independent agency governed by a Board of Trustees. Enrollment has increased substantially since 1980. The classrooms in Malibu are nearing capacity due to population increases. There are two elementary schools and one high school in Malibu run by the Santa Monica/Malibu Unified School District: Malibu High, Cabrillo Elementary and Webster Elementary. A third elementary school on Point Dume was closed in the 1980s due to lack of students and is now operated as a community center. This site is still owned by the school district and may eventually be reopened.

Hospitals: The City uses Santa Monica Hospital as the base hospital for emergency care for residents in Malibu. Santa Monica Hospital is located at 1250 16th Street in the City of Santa Monica -- a distance of between 4.5 and over 25 miles from Malibu, depending upon from where in Malibu the distance is measured. Travel to the hospital can take as much as 40 minutes at other than peak hours. Nearby hospitals used when Santa Monica Hospital emergency facilities are at full capacity are the University of California, Los Angeles (UCLA) Medical Center located at 10833 Le Conte Avenue in Los Angeles, and Westlake Hospital located at 4415 South Lakeview Canyon Road, Westlake Village. Helicopters are often used during peak periods to reduce travel times. The adequacy of hospital services is difficult to determine due to the different range of services offered.

Libraries: The Los Angeles County - Malibu Branch Library, located at 23519 Civic Center Way, is the only library facility serving the City. The Malibu Branch Library provides adult and juvenile reference services and materials; audiovisual materials, including compact discs, VHS videocassettes and Listen for Pleasure audiocassettes; Reader's Advisory. The Malibu Branch Library serves a population of 20,282 and 7,506 housing units in and around the City. The library is 16,530 square feet and holds over 64,000 books. The library maintains a cooperative lending relationship with County library in Los Angeles through the South State Cooperative Library System.

Electrical Service: The Southern California Edison Company (SCE) provides electricity from three primary stations and three secondary stations. The Southern California Gas Company provides natural gas. General Telephone provides telephone service. Cable television is an information and entertainment source for residents of most areas of the City. Presently, Falcon Cable services the Malibu area.

Water: Water is supplied to the City by County Waterworks District No. 29 from the Metropolitan Water District of Southern California (MWD). The MWD obtains its water from the State Water Project and the Colorado River. Wholesalers of this water in the Malibu/Santa Monica Mountains area are the Las Virgenes Municipal Water District and the West Basin Municipal Water District. These wholesalers distribute to three retailers which include the Los Angeles County Waterworks District No. 29, Silvas Park Mutual Water Company, and Las Virgenes Metro Water District. Many of the City's water mains and tanks have been identified by the City and by Waterworks District No. 29 as severely undersized. District No. 29 estimates it may cost \$100,000,000 to upgrade the City's water system to current minimum standards.

There are also a number of private wells that supply water within the City. However, the utilization of wells as a source of potable water has steadily declined since 1965, when water became available through the MWD. Although the amount of water supplied by these wells is now considered to be insignificant, they are sources of inexpensive water to agricultural and other interests located away from piped water service.¹⁰

Sewers: Municipal sewer service is available only to the far eastern end of the City. There are five small, package sewage treatment plants within the city: the Latigo Bay Shores, Point Dume, Trancas Canyon, Malibu Mesa and Maison de Ville. Hughes Research Lab operates their own facilities and Pepperdine University is served by the Malibu Mesa Plant. These plants are described in detail in the Philip Williams & Associates Ltd. and Peter Warshall and Associates report of March 1992 entitled "The Malibu Wastewater Management Study."

Most wastewater is treated on-site. Improperly maintained septic systems have caused alleged health and safety problems, but, with adequate area for leaching fields or regular disposal, can be safely operated in almost all areas of the City. The "Malibu Wastewater Management Study" recommends programs for ensuring that septic systems are properly engineered, installed and maintained. Details of the hazards associated with the systems are described in the Background Report to the Safety Element.

Solid Waste: Solid waste disposal in Malibu is presently handled by four private hauling companies, one of which is under contract to service the Los Angeles County/Malibu Garbage Disposal District. All four haulers deliver solid waste to the Calabasas Landfill. The Calabasas Landfill is owned and operated by the Los Angeles County Sanitation District and services Malibu as one of many regional sources. The landfill is presently scheduled for closure in 2015 and as of 1990, has a remaining capacity of 12 million tons of waste yielding a projection that the landfill will accommodate an average 500,000 tons of waste each year during that period. Malibu contributes less than 10 percent of that amount. Based on the 1992 Preliminary Draft Source Reduction and Recycling Element for the City, there were 38,750 tons of waste disposed from Malibu residents and businesses in 1991.

A complete discussion of the existing community services is found with the Circulation and Infrastructure Element.

Land development generally follows the areas that are provided with infrastructure and utilities. This allows development to proceed in an orderly and economical manner.

7.3.4 Inventory of Governmental Constraints

The State of California defines governmental constraints to include land use and zoning controls, development moratoria, site improvement requirements, lengthy permit processing (including both City and Coastal Commission approval), excessive fees and exactions. These regulatory actions of local government are designed to control development within a community. While providing procedures and standards for order and public welfare, these actions may also unnecessarily restrict growth. Government regulation may inhibit the needed residential development when they render projects economically infeasible. They may also increase development costs and indirectly raise rents and housing market values. The State requires that each Housing Element review the applicable regulations with respect to their impact on the cost of development.

The City's Interim Zoning Ordinance (IZO) is a constraint to additional affordable housing because of the reduction in permitted development (or downzoning). However, the City has since adopted a mixed-use zone to permit the development of affordable housing.

7.3.4.1 Ordinances

The City Council issued a building moratorium for Malibu upon the City's incorporation. The moratorium expired on March 28, 1993. The City now has in place an Interim Zoning Ordinance (IZO) which provides reasonable standards for development. The IZO is intended to ensure that future development in the City is consistent with the City's objectives to preserve sensitive and unique environmental resources, retain the City's rural character, ensure that future development does not over-burden the City's limited infrastructure, and provide a balance of land uses. The over-riding objective of the IZO and other ordinances adopted by the City is to protect the health, safety and welfare of the public. Further, and as previously noted, the City has adopted a mixed-use zone to permit the development of affordable housing.

The IZO's zoning designations are more restrictive in some cases than the land use categories presented in this General Plan and will be amended accordingly. The land use densities proposed in the Land Use Element (and as depicted on the Land Use Policy Map of the Land Use Element) have been developed based on specific constraints facing the City: (a) limited infrastructure; (b) sensitive and unique environmental resources; and (c) the area's geology and other physical constraints (including, but not limited to areas subject to flooding, landslides, liquefaction, brush fires, and other risks).

The City enforces the state's Building Standards Code. The use of uniform codes reduces housing costs and the corresponding City codes and ordinances do not constitute a constraint to the City's housing supply. The City's codes and ordinances

are necessary for the City to ensure the protection of the City and to ensure the health, safety and welfare of the public and property. Table 7-14 provides a summary of the City's zoning regulations.

As part of the City's program to meet its affordable housing needs, the City will attempt to stimulate affordable housing production by modifying standards for new construction. The State density bonus statute addresses one area in which a development standard can be modified to reduce the cost of providing affordable housing. The City will create a discretionary modification permit that will allow developers of affordable housing to apply for modification of particular standards for particular projects. This way the City can remove any unnecessary barrier to development of a meritorious project, including parking requirements, lot coverage limits, site design standards and setbacks.

7.3.4.2 Permit Processing

Time and costs constraints are placed on housing construction by the development review process. One of the goals of the Planning Department is to process planning applications in a timely manner. Processing times within Malibu are similar to those of other cities that have similar sensitive environments. Permit processing in Malibu takes an average of three to four months. Due to geologic and geotechnical conditions in the City, development is subject to geologic and geotechnical reviews. Although the requirement for geological and geotechnical reports can extend the permit process, and thereby raise the cost of residential development, these reports are necessary to ensure public safety in Malibu. The City does not have a public sewer and as such each project proposed in the City must receive septic approval. The review of both geology and septic are done concurrently with the planning review which shortens the over-all processing time for projects.

Procedural handouts are available from the Planning Department and applicants are encouraged to meet with City staff prior to submittal to ensure that the application is complete. Development is subject to standards in the Interim Zoning Ordinance, which is not unlike other cities except for a heightened review of environmental issues. It is the intent of the General Plan to increase the degree of certainty in the development review process without reducing the level of protection afforded to significant environmental features within Malibu.

The City's processing time for various permits is consistent with the state's Permit Streamlining Act (PSA). The time necessary to review and process permits, therefore, does not present a delay to development nor creates a government constraint.

Applications which meet the requirements permitted by right of the zoning code require only an administrative zone clearance or plot plan review. This can be granted by staff, without the need for a public hearing before the Planning Commission.

Discretionary review for certain modifications (such as an increase in the permitted height up to 28 feet or an increase in the allowable amount of grading up to a certain amount) can be granted by the Planning Director after appropriate notice to affected property owners. Conditional use permits and other discretionary applications are reviewed by the Planning Commission after a duly noticed public hearing. The City's procedures are typical of most cities. There is nothing unusual or onerous about the City's notice requirements and the process does not needlessly hinder development. Therefore, this process is not considered a constraint.

Currently, in addition to permit approval by the City, most projects also require a coastal development permit from the California Coastal Commission. This dual permit requirement can add expense and delay. The City intends to seek certification of its local coastal program, which is being developed in conjunction with this Plan. Once certified, the City will issue coastal development permits as part of its planning review. This will significantly reduce the time and cost involved in obtaining necessary approvals to develop land in Malibu.

7.3.4.3 Fees

Processing fees for building permits, development review, and infrastructure costs add to the total cost of housing construction, but not necessarily to the price of the finished housing product. The price of the finished product must be an amount the market is willing to pay or the product will not sell. If the cost of the product, including profit, exceeds the price which it will bring in the market, the prudent developer will choose not to develop that product at that location unless the additional cost may be absorbed through a reduction in expected profit. There are several types of fees associated with development in Malibu as set forth in Resolution No. 91-67. Typical types of fees are listed below:

- ◆ Building Permit Fees
- ◆ Grading Permit Fees
- ◆ Plumbing Permit Fees
- ◆ Rehabilitation Processing Fees
- ◆ Electrical Permit Fees
- ◆ Mechanical Permit Fees
- ◆ Quimby/Parkland Fees
- ◆ Geologic Review Fee Deposits
- ◆ Map and Related Document Processing
- ◆ Environmental Health Review

Other fees that are typical for projects requiring Planning Department review are as follows:

- ◆ General Plan Amendment
- ◆ Negative Declaration
- ◆ Site Plan Review
- ◆ Parcel Map
- ◆ Initial Study
- ◆ Plot Plan Review
- ◆ Tract Map
- ◆ Zoning Ordinance Amendment

The fees required by the City only cover the cost to the City of providing the service(s) for which the fees are imposed. The City does not have the financial resources to subsidize housing by waiving or reducing these fees.

A comparison of the City's fees with those imposed by the County of Los Angeles for similar projects is provided in Appendix A to this Housing Element.

In addition to the fees for services described above, there are currently two impact fees in the City: Wildland Fire Fee and Quimby Act/Parkland Development Fee. The Wildland Development fee was initiated by the Los Angeles County Fire Department and is the same fee charged by most of the cities and in the unincorporated areas of the County surrounding Malibu. The fee is necessary to assure adequate fire response equipment and services are available as Malibu is in a high risk fire zone. The fee is \$18 per square foot of new construction. The Quimby Act fee was first enacted by the County of Los Angeles prior to the City's incorporation and the City added a park land fee which applies to new construction other than new subdivisions. The Quimby Act fee is based on the following formula:

$$X = .003(UP)$$

Where:

X = Local park space obligation in acres.

U = Total approved number of dwelling units.

P = 3.4 for detached single-family residences;
2.9 for attached single-family (townhouse) residences, two-family residences, and apartment houses containing fewer than five dwelling units;
2.1 for apartment houses containing five or more dwelling units; and,
2.0 for mobile homes.

The Parkland Development Fee is established as follows:

Type of Dwelling Unit	Fee (per dwelling unit)
Single family detached dwelling unit	\$2,073
Attached multi-family attached dwelling unit (containing less than 5 dwelling units per building)	\$1,770
Attached multi-family attached dwelling unit (containing 5 or more dwelling units per building)	\$1,318

These fees are not unique to Malibu and they do not exceed the cost of mitigating the direct impacts of development. Moreover, the City does not have the financial resources to fund such mitigation. Any new fees Therefore, these fees are not considered a constraint to development. There are currently no other development fees. The City will consider other development fees to mitigate the impacts of development on circulation, trails, and affordable housing. One of the considerations before enacting any new fee would be the effect that the fee would have on the cost

of development and, in particular, whether the fee would place an undue burden on the development of affordable housing. However, the City is not currently considering any new fees. Given the time it would take to prepare an adequate study to determine whether an impact fee is necessary, the City will not enact any new fees in the current planning period, if it does at all.

In addition to the above-described fees and costs imposed by the City, the California Coastal Commission administers a transfer of development credit program.

Operation of the Coastal Commission's TDC Program in Malibu.

For each new single-family residential parcel which is proposed to be created (above and beyond those parcels which already exist), an applicant must acquire one transfer of development credit (TDC). That is, the applicant must demonstrate that the development potential on the equivalent of one developable parcel has been extinguished. This is normally done by recording an offer to dedicate an open space easement over the subject property. The open space easement prohibits construction of a residence and most other types of development.

As implemented by the Coastal Commission, the TDC Program in Malibu is mandatory for applicants who propose to intensify land use through subdivisions or construction of condominiums or rental housing projects. Any property owner may choose not to participate in the program by simply applying for a coastal development permit for no more than one residential unit on each existing residential parcel.

The Commission has recognized several ways to "generate" a TDC (that is, to assemble the equivalent of one developable parcel which can then be restricted to open space). For instance, in a small-lot subdivision, a credit will be considered "generated" according to a formula which measures the "buildability" of the site. To qualify property as a TDC generator, site-specific soil studies, percolation tests, and the like are not typically performed, due to the often considerable expense which such tests involve. Instead, the formula is based on the criteria of slope, road access, and water service, which can be measured without undue expense to the property owner.

The number of small lots required to equal one TDC depends on the application of the formula to the lots in question: the more gentle the slope, the greater the credit value of the lots, since a more generous dwelling could be constructed. As an example, one or more lots capable of supporting a small-to-medium sized dwelling (one with 1,500 square of floor space) are determined to generate one TDC.

Where small lots are less suited to development, transfer of development credits may be generated based on their size rather than slope. Thus, the second way of generating a TDC would be based on 500 square feet of "credit" for each lot which has at least 4,000 square feet of area. Three such lots, generating 1,500 square feet of credit, are considered to generate one TDC.

A third way to generate TDCs, for lots smaller than 4,000 square feet, is to assign a value of 1 TDC for any combination of lots adding up to a total of one acre. The assumption here is that an acre of land, even if steep, can probably accommodate at least a small dwelling. Of course, if the property were determined to be completely unbuildable, no TDCs would be generated, since the whole point of the program is to avoid development which could otherwise occur.

However, TDCs are considered to be generated, the mechanism by which development potential is extinguished is recordation of an offer to dedicate an open space easement. In general, the open space easement allows no development as defined by the Coastal Act, except for removal of vegetation which constitutes a fire hazard, installation of underground utility lines or septic systems, passive public recreational use, directional or no-trespassing signs, and fences which are necessary to protect natural resources and/or private property. Residential use, as a primary use, is not allowed, although some easements allow uses associated with a residence, such as corrals or decks. Such ancillary uses are appropriate where the underlying fee interest in the land is under the ownership of an adjacent home owner, how can assume the necessary responsibility for payment of property taxes and for weed abatement. In other instances, where other public land holdings are adjacent or nearby, fee ownership of the land is turned over to a public agency, such as the State Parks Department.

The impacts of this fee on housing production may or may not be justified. Once the City has its local coastal plan certified, it will be in the position to modify the TDC requirements so that they do not impose an undue burden on the production of new affordable housing.

7.3.4.4 Financial Constraints

There are limited financial resources available to the City and to the private sector to subsidize housing production. The City has very limited financial resources; for example, the City does not have (and is not eligible to form) a redevelopment agency that could generate tax-increment funds to either offset the high cost(s) of land and/or develop public infrastructure and utilities necessary for affordable housing. The Supreme Court recently upheld the validity of Proposition 62, which requires approval of the voters for any new general tax or tax increase. This law will have a profound impact on the City financially and virtually eliminates any readily available source of financial relief for the City. In addition, the City has been identified by the Southern California Association of Governments as a "housing rich" community; that

is, there are more housing units in the general area than identified in the region's long-range objective to balance jobs and housing. Future development in the City, in order to implement SCAG's regional planning objectives, should be directed at providing additional employment opportunities. The development of additional employment opportunities through non-residential development will likely be a source of additional revenue to the City. In addition, most of the City's residents do not qualify for federal and/or state housing assistance programs due to the high cost of land and the relatively high income levels in the City.

7.3.4.5 Affordable Housing Opportunities

A household is defined as in need of assistance if it meets the following income and payment criteria:

1. Has an annual income of 80% or less of the median income for the County, and
2. Pays an inordinate share of that income (currently defined as greater than 30%) toward a house payment or rent.

Thus, a housing unit is affordable to a low income family if it costs less than 30% of the family's income to reside there. The median income in LA County in 1994 was \$45,200. Thus, for a household of 2 persons, the maximum qualifying incomes for each category are as follows:

Very low income:	\$20,150
Low income:	31,900
Moderate:	48,360

Using the 30% rule, an affordable monthly rent for each category is as follows:

Very low income:	\$ 504
Low income:	767
Moderate:	1,209

To illustrate the application of this information, using the registration records of the mobilehome parks and factoring in a 10% utility allowance, staff analyzed the mobilehome park rents and compiled the following information:

Affordable to:	Paradise Cove	Point Dume Club
Very low income	185	0
Low income	76	72
Moderate	10	165
Above-moderate	0	57

These rents do not include any loan payments for the coach itself.

In order to assure that a housing unit remains affordable, the City would require deed restrictions on the sale or rental of the unit. State law governs density bonuses requires the developer to assure that the additional units will be affordable for at least 30 years. The City will adopt the same policy.

The City has created a mixed use zone that would provide opportunities for affordable housing in the City. Affordable housing units would be allowed either above or behind commercial structures in the community general (CG) zone. In order to encourage the development of these units, an increase in Floor Area Ratio (FAR) would be allowed.. Currently the allowable FAR in the CG designation ranges from .20 to .25. An increase of .05 up to an FAR of .30 would be allowed for affordable units. This FAR translates to 13 dwelling units an acre for an all residential project. Assuming that 2/3rds of a typical project would be commercial and 1/3 residential, the City expects approximately 4 residential units per acre in addition to the commercial development. At 4 units per acre, the 34 acres of commercial general could yield 136 affordable residential units. However, the City estimates that at least 60 units will actually be constructed. The FAR conversion was arrived at by multiplying the FAR by 43,560 (number of feet in an acre) and then dividing by an average unit size of 1,000 square feet.

The 13 dwelling units an acre would represent an all residential project. Assuming that 2/3's of the project would be commercial and 1/3 residential, a property owner would be getting 4 units a acre as a bonus to the commercial. There are currently 34 acres of commercial general property in the City which could provide for an additional 136 units. Since not all of the property owners will make advantage this provision, the City is projecting a total of 60 potential units.

Second units, or granny flats as they are commonly known, are dwelling units constructed on the same parcel on which the primary single-family unit is located, providing independent living quarters which the homeowner may rent out or provide for a family member. Second units provide a cost effective means of serving additional development through the use of existing infrastructure, and provide opportunities for affordable housing.

The City has adopted an ordinance to facilitate and regulate the development of second units. Second units are permitted by right without a conditional use permit on any rural residential zoned lot which contains a single-family dwelling. Many second units in the City were built prior to cityhood as guest homes without a kitchen. Kitchens were often added later contrary to L.A. County ordinances. These units would can be legalized but residents may not wish to do so because of the effect of permit issuance on property tax assessments..

The City has also created a Multifamily Beach Front (MFBF) land use designation to accommodate multifamily beach front housing. Many of the beach front lots in the eastern portion of the City are currently developed with multifamily family dwellings

which the City wanted to recognize and provide property owners of vacant lots with a viable option for developing other small unit (2 to 5 dwellings), multifamily residential projects at densities similar to the surrounding area. The MFBF zone allows for one (1) unit per 1,885 square feet of lot area not to exceed 4 units. The zone would further allow one (1) additional unit per lot for affordable housing.

7.3.4.6 Affordable Housing Site Inventory

State law requires Housing Elements to include an inventory of land that is suitable for residential development. The purpose of this inventory is to compare the jurisdiction's total residential holding capacity with the locality's projected construction needs to determine if sufficient sites are available to meet identified housing needs. As shown on Table 7-12, the City has designated sufficient residential land to accommodate the City's housing needs.

The City of Malibu has very few vacant parcels of land suitable for high density residential development that could be developed without creating significant safety hazards and adverse environmental impacts. These constraints include limited infrastructure, sensitive biological habitats and habitat linkages, and steep hillsides characterized by potentially unstable slope conditions. In order to afford reasonable use of land and protect public safety and avoid significant adverse impacts, the City has created a mixed use zone as described earlier to accommodate adequate new affordable housing in the City. Affordable housing for low, very low and moderate income families would be allowed in all Commercial General (CG) zones in the City.

There are a total of 34 acres of vacant or undeveloped land in the CG zone which could result in a total of 134 affordable units. In addition, there are 11 acres of land developed with shopping centers which have the potential to be redeveloped with mixed use which would result in a potential 44 more units. The City anticipates that not all property owners will take advantage of the mixed use concept and has forecasted a total of 60 affordable units in the CG zone.

One of the vacant sites is a 17 acre parcel bounded by Pacific Coast Highway, Cross Creek Road, Civic Center Way and Webb Way and is located directly across the street from City Hall. The property owner has often expressed an interest in providing affordable housing in the Civic Center area and at one time proposed a mixed use development that included housing on the site. The site could accommodate 68 units.

Another vacant site is located on the northwest corner of Civic Center Way and Cross Creek Road and consists of 2.3 acres (potential 9 units) and directly north of that site on the east side of Cross Creek Road is an approximately 9 acre site adjacent to Malibu Creek that could accommodate 36 units. A portion of this 9 acre site is developed with temporary buildings and storage yards. This site is located away from Pacific Coast Highway and may offer an excellent opportunity for affordable housing.

The existing shopping centers offer opportunities for redevelopment. The centers are one story in height which would allow for the construction of housing units on the second story. The City does not anticipate these properties to be redeveloped until after the vacant properties are developed. If the mixed use concept is successful in the new centers, the potential for these centers to be redeveloped will increase greatly.

All the parcels identified are relatively flat parcels without any major slopes that would inhibit development. Some of the area is within a floodplain and thus any development in the area would have to comply with the requirements of the Federal Emergency Management Agency's regulations; however, these structural requirements are not believed at this time, given the available information, to be major impediments to construction. Most of this area is suspected to be subject to liquefaction and therefore careful geologic review and planning will have to guide their development; however, most other areas in Malibu suffer much greater geologic constraints than these are believed to be at this time and given the available information. These properties are all served by roads and all other essential services and facilities, except that there is no public sewer. Consequently, a system must be carefully designed to manage wastewater generated by development. Given the pervasive environmental constraints that exist throughout the City (See Section 7.3.3.1), these sites are believed to be the most suitable to accommodate affordable housing in the City. The City's programs are designed to encourage and assist their development with affordable housing. Because of the unmitigatable environmental constraints of the City, if these sites ultimately prove to be incapable of providing adequate affordable housing, for reasons beyond the City's control, the City may be unable to fully meet its share of the regional housing need.

Table 7-15: Land Use Requirements, Controls and Standards by Zone

Land Use Category	Minimum Lot Size/ Density	Minimum Lot Dimension	Impermeable Coverage Limit	Setbacks ¹	Height ²	Parking	
Rural Residential Districts:							
RR-40 RR-20 RR-10 RR-5 RR-2	40 acres 20 acres 10 acres 5 acres 2 acres	Width: 150 feet Depth: 250 feet	30% to 45%, not to exceed 25,000 square feet	<u>Front Yard:</u> 20% of total depth of lot <u>Side Yard:</u> 25% (cumulatively) of total width of lot, but no single lot should be less than 10% or 5 feet (whichever is greater) <u>Rear Yard:</u> 15% of Yard or 15 feet (whichever is greater)	18 feet above natural or finished grade (whichever is lower) for all residential structures; up to 28 feet with permit	2 enclosed and 2 unenclosed spaces per unit	
Single Family Residential:							

Land Use Category	Minimum Lot Size/ Density	Minimum Lot Dimension	Impermeable Coverage Limit	Setbacks ¹	Height ²	Parking	
Non-Beachfront Property SF-L SF-M	1 acre ½ acre	Width: 100 feet Depth: 150 feet	30% to 45%, not to exceed 25,000 square feet	<u>Front Yard:</u> 20% of total depth of lot <u>Side Yard:</u> 25% (cumulatively) of total width of lot, but no single lot should be less than 10% or 5 feet (whichever is greater) <u>Rear Yard:</u> 15% of Yard or 15 feet (whichever is greater)	18 feet above natural or finished grade (whichever is lower) for all residential structures; up to 28 feet with permit	2 enclosed and 2 unenclosed spaces per unit	Fee or in-lieu dedication of land

Land Use Category	Minimum Lot Size/ Density	Minimum Lot Dimension	Impermeable Coverage Limit	Setbacks ¹	Height ²	Parking	
Beachfront SF-L SF-M	1 acre ½ acre	Width: 100 feet Depth: 150 feet	30% to 45%, not to exceed 25,000 square feet	<u>Front Yard:</u> 20 feet maximum or average of 2 immediate neighbors (whichever is less) <u>Side Yard:</u> 10% of lot width on each side, with a 3 feet minimum and 5 feet maximum <u>Rear Yard:</u> Determined by the stringline rule	24 feet - flat roof 28 feet - pitched roof	2 enclosed and 2 unenclosed spaces per unit	
Multiple Family Residential:							

Land Use Category	Minimum Lot Size/ Density	Minimum Lot Dimension	Impermeable Coverage Limit	Setbacks ¹	Height ²	Parking	
Non-Beachfront Property MF	6 units/acres; 20,00 square feet	Width: 100 feet Depth: 150 feet	30% to 45% (25,000 square foot maximum)	<u>Front Yard:</u> 20% of total depth of lot <u>Side Yard:</u> 25% (cumulatively) of total width of lot, but no single lot should be less than 10% or 5 feet (whichever is greater) <u>Rear Yard:</u> 15% of Yard or 15 feet (whichever is greater)	18 feet above natural or finished grade (whichever is lower) for all residential structures; up to 28 feet with permit	2 enclosed and 2 unenclosed spaces for each dwelling unit and 1 guest parking space for each 4 units (or fraction thereof)	

Land Use Category	Minimum Lot Size/ Density	Minimum Lot Dimension	Impermeable Coverage Limit	Setbacks ¹	Height ²	Parking	
Beachfront Property MF	6 units/acres; 20,00 square feet	Width: 100 feet Depth: 150 feet	30% to 45% (25,000 square foot maximum)	Front Yard: 20 feet maximum or average of 2 immediate neighbors (whichever is less) Side Yard: 10% of lot width on each side, with a 3 feet minimum and 5 feet maximum Rear Yard: Determined by the stringline rule	24 feet - flat roof 28 feet - pitched roof	2 enclosed and 2 unenclosed spaces for each dwelling unit and 1 guest parking space for each 4 units (or fraction thereof)	
Mobilehome District:							

Land Use Category	Minimum Lot Size/ Density	Minimum Lot Dimension	Impermeable Coverage Limit	Setbacks ¹	Height ²	Parking	
MH	N/A	N/A	N/A	N/A	N/A	2 spaces for each mobile home space	
Commercial General (incentives in the form of development standards available for affordable housing projects)	5 acres/ .30 FAR	Width: 300 feet Depth: 500 feet	30-45% (25,000 sq.ft. maximum)	<u>Front Yard</u> : 20% of total depth of lot <u>Side Yard</u> : 25% (cumulatively) of total width of lot, <u>Rear Yard</u> : 15% of Yard or 15 feet (whichever is greater) (reductions available for affordable housing)	18 feet above natural or finished grade (whichever is lower) for all residential structures; up to 28 feet with permit	1 space for each 200 square feet of shopping center/1 space for every 225 square feet of general retail (reductions available for affordable housing projects)	

Land Use Category	Minimum Lot Size/ Density	Minimum Lot Dimension	Impermeable Coverage Limit	Setbacks ¹	Height ²	Parking	
1) a. For the purposes of calculating yards, slopes equal to or greater than 1:1 shall not be included in the lot dimension. b. All structures must be set back at least 25 feet from the top of a 45 degree angle. For slopes greater than 45 degrees, setback shall be 25 feet horizontal as measured from the top of the slope at the end of the 45 degree line commencing at the base of the slope. Where feasible, all structures shall be set back a minimum of 100 feet from any environmentally sensitive area. c. Beachfront Bluffs: consistent with the stringline rule, structures may extend over a bluff which is 10 feet or less in height, from toe to top. Shoreline Bluffs: Structures on non-infill lots shall not extend over a bluff which is greater than 10 feet, but less than 25 feet. Structures on infill lots on shoreline bluffs shall conform to the stringline rule. d. On ridgelines, structures shall be sited a minimum of 100 feet horizontally from and have a roof below the nearest ridgeline. 2) Includes satellite dishes. Source: City of Malibu Interim Zoning Ordinance, June 1993							

7.4 Goals, Objectives, Policies and Implementation Measures

The quantified objectives are estimates based on a reasonably predicted response to the programs in view of all available information. There are many

factors and constraints outside the City's control that may influence the actual response. These estimates represent the City's best effort to quantify potential results.

The following outlines Malibu's proposed program to ensure that an adequate amount of housing is provided over the life of the Element to accommodate its fair share of regional housing needs and to ensure that adequate housing opportunities are available to all economic segments of the community.

H GOAL: ADEQUATE HOUSING FOR EXISTING AND PROJECTED NEEDS OF ALL ECONOMIC SEGMENTS OF THE COMMUNITY.

H OBJECTIVE 1.1: All residents, including those with special needs, have access to decent, safe and sanitary housing that is available and affordable.

H Policy 1.1.1: The City shall foster a mix of housing types.

H Policy 1.1.2: The City shall encourage new housing to meet housing needs based on the ability to provide public services and within the limits of Malibu's environmental constraints.

H Policy 1.1.3: The City shall identify adequate sites for 226 new housing units by the year 2000, 25 of which would be affordable to very low income families, 27 of which would be affordable to low income families, 29 of which would be affordable to moderate income families and 145 of which would accommodate those families above the moderate income level.

H Policy 1.1.4: The City shall accommodate rebuild efforts for those 268 families whose homes were lost due to the 1993 firestorms and implement programs to respond to those who suffer losses in future disasters.

H Policy 1.1.5: The City shall work with neighboring communities to find an accessible site for a regional homeless shelter.

H Policy 1.1.6: The City shall provide temporary emergency shelter in response to disasters.

To implement these policies the City shall:

H Implementation Measure 1: Work with property owners and developers to encourage development of the amount and type of housing that accomplishes the community's goals, including negotiating development agreements in which providing deed restricted affordable housing serves as part of the public benefit justifying the agreement.

Responsible Department:	Planning Department/City Manager
Funding source:	General fund
Timeframe:	January 1999
Objective:	6-8 units

H Implementation Measure 2: Evaluate all General Plan amendment requests in light of overall impact on distribution of densities, especially on higher density zoning.

Responsible Department:	Planning Department
Funding source:	Permit fees
Timeframe:	On-going
Objective:	No net loss of units

H Implementation Measure 3: Develop and maintain a handbook for public distribution setting forth how to apply for housing development in the City and summarizing the basic development criteria for different zones.

Responsible Department:	Planning Department
Funding source:	General fund/permit fees
Timeframe:	January 1997
Objective:	Not applicable

H Implementation Measure 4: Develop a density bonus system consistent with State law in which density on a project site may be increased by 25% where units are deed restricted for either (a) 20% for low income families, (b) 10% for very low income families or (c) 50% for seniors. The City shall encourage its use in areas where hazards such as flooding, fires, earthquakes and liquefaction do not pose unreasonable risks.

Responsible Department:	Planning Department
Funding source:	General fund/fees
Timeframe:	May 1996
Objective:	3-4 units

H Implementation Measure 5: Permit residential care facilities for seniors and similar innovative alternative living projects in commercial areas where such projects would be compatible with the surrounding uses.

Responsible Department:	City Council
Funding source:	General fund
Timeframe:	January 1996
Objective:	10 units

H Implementation Measure 6: Permit structures and projects with commercial uses and affordable residential units in commercial general (CG) zones. Floor area dedicated to very low, low, or moderate income housing will be permitted a density bonus up to .05 over the maximum intensity permitted within commercial general zones.

Responsible Department:	City Council
Funding source:	General fund
Timeframe:	January 1996
Potential no. of units:	136 units
Objective:	60 units

H Implementation Measure 7: Expedite permit processing, waive fees where appropriate and provide special assistance to homeowners seeking to rebuild homes burned in fire, damaged in flood or other disaster.

Responsible Department:	City Council/Building Department
Funding source:	General Fund/FEMA/OES
Timeframe:	As needed
Objective:	268 rebuilt homes

H Implementation Measure 8: Use Bluffs Park and Point Dume Community Center as a Red Cross Emergency shelters and open whatever City buildings are necessary and appropriate to provide displaced residents shelter after a disaster.

Responsible Department:	City Council
Funding source:	General fund
Timeframe:	On-going
Objective:	Not applicable

H Implementation Measure 9: Make emergency shelters and transitional housing a permitted or conditionally permitted use in appropriate zones.

H OBJECTIVE 2.1: Equal opportunity for all residents to live in housing of their choice

H Policy 2.1.1: The City shall encourage a variety of types of housing, including most particularly housing for those with special needs such as the disabled, elderly, large families, and families with single heads of households.

H Policy 2.1.2: The City shall support the enforcement of existing prohibition of discrimination in housing based on race, ethnicity, national origin, age, religion, sex, and family status.

To implement these policies the City shall:

H Implementation Measure 10: Continue to enforce State's barrier-free policies and provide complaint referral services to Department of Fair Employment and Housing.

Responsible Department:	Building Department/Code Enforcement
Funding source:	Permit fees/seek additional revenue sources
Timeframe:	On-going
Objective:	Not applicable

H Implementation Measure 11: Streamline permit process and building inspections to reduce the cost of building housing that accommodates those with special needs by providing one-stop service for ministerial permit approvals.

Responsible Department:	Building Department
Funding source:	Permit fees/seek additional revenue sources
Timeframe:	June 1997
Objective:	Not applicable

H OBJECTIVE 3.1: Available affordable housing.

H Policy 3.1.1: The City shall promote the adaptation of existing structures to meet the City's affordable housing needs.

H Policy 3.1.2: The City shall permit affordable housing units in commercial general zones mixed-use projects as a means of meeting the City's affordable housing goals.

H Policy 3.1.3: The City shall regulate space rents in the City's mobilehome parks to conserve affordable housing.

H Policy 3.1.4: The City shall assist very low, low and moderate income families to be aware of affordable housing opportunities.

To implement these policies the City shall:

H Implementation Measure 12: Monitor the supply of new housing provided as affordable to very low, low and moderate income persons, including, but not limited to, mobilehomes and second units on existing residential lots.

Responsible Department:	Planning Department
Funding source:	General fund
Timeframe:	On-going
Objective:	Not applicable

H Implementation Measure 13: Require new commercial and industrial development to mitigate its effect on affordable housing in Malibu by either providing an adequate number of affordable housing units to meet the new demand for such housing created by the project or pay an in-lieu fee. The fee shall be deposited in the City's affordable housing fund and be used for programs that purchase or subsidize housing units or mobilehome park spaces to make them available at an affordable price to very low, low and moderate-income families.

Responsible Department:	City Council
Funding source:	General fund
Timeframe:	January 1998
Objective:	5 units

H Implementation Measure 14: Provide information and referral service to assist very low, low and moderate income persons and families, and the elderly and handicapped in finding suitable housing at affordable cost.

Responsible Department:	Planning Department
Funding source:	General fund
Timeframe:	On-going
Objective:	Not applicable

H Implementation Measure 15: Explore financing, such as a rent subsidy program using Community Development Block Grant (CDBG) Funds, to develop affordable housing in existing multi-family projects and mobilehome parks.

Responsible Department:	PlanningDepartment/FinanceDepartment
Funding source:	CDBG/seek other funding sources
Timeframe:	June 1996
Objective:	5-10 units

H Implementation Measure 16: Encourage the adaptive reuse of commercial buildings to residential use by allowing increased density where new housing units are created in existing structures and in proportion to the number of new units which are deed restricted for very low, low or moderate income families and, where necessary, by decreasing the minimum number of parking spaces required for each unit restricted for seniors.

Responsible Department:	City Council
Funding source:	General fund
Timeframe:	January 1997
Objective:	3 units

H Implementation Measure 17: Establish a program to promote the expeditious processing of residential projects which qualify for a density bonus under Government Code §65915 as may be amended from time to time or applicable state law.

Responsible Department:	City Council
Funding source:	General fund
Timeframe:	April 1996
Objective:	Dependent on developer response

H Implementation Measure 18: Allow "granny flats" consistent with Government Code Section 65852.1 and adjust the parking requirement for units restricted to serve senior citizens.

Responsible Department:	City Council
Funding source:	General fund
Timeframe:	On-going
Objective:	5 units

H Implementation Measure 19: Offer incentives to developers willing to provide affordable housing to low and very low income families. A minimum of 30 year affordability shall be required to receive any incentive. Any developer who received approval to use any incentive shall be required to screen initial tenants or buyers for compliance with income group limits and establish a monitoring system to ensure the unit's continued affordability. The incentives may include, but are not limited to the following: (1) reduction in setback requirements, reduction in ratio of vehicle parking spaces to housing units, and increase of square footage maximum, where such modification would not conflict with the building standards in the building code or have a significant adverse impact on the public health and safety; (2) priority processing of planning approvals and building permits; (3) direct financial aid including Community Development Block Grant funding, subsidize infrastructure or contribution from City's affordable housing trust fund.

Responsible Department:	Planning Department
Funding source:	General Fund, CDBG, Development Fees
Timeframe:	June 1997
Objective:	Not applicable

H Implementation Measure 20: Investigate and, if it can be designed in a manner that does not create an undue burden of housing production, develop an inclusionary housing program which requires new subdivisions of five or more units/lots to deed restrict 20% of new units for very low, low and moderate income residents. The program shall include provisions such that, where it is infeasible to provide the inclusionary units on-site, the subdivider

may elect to provide the units off-site or pay a fee in lieu of constructing units. In-lieu fees shall be deposited into an affordable housing trust fund to be used to purchase existing units or mobilehome spaces for use as affordable housing.

Responsible Department:	City Council
Funding source:	General fund
Timeframe:	June 1998
Objective:	10 units

H Implementation Measure 21: Permit second units and allow reductions in the parking standards for second units which are restricted for rent by very low, low and moderate income families where the modification would not have a significant adverse impact on traffic and parking in the particular neighborhood where the modification is desired.

Responsible Department:	City Council
Funding source:	General fund
Timeframe:	May 1996
Objective:	5 units

H Implementation Measure 22: Work with Los Angeles County Housing Authority to obtain Section 8/Vouchers for City residents.

Responsible Department:	City Council
Funding source:	U.S. Department of Housing and Urban Development
Timeframe:	May 1996
Objective:	3-5 vouchers

H Implementation Measure 23: Participate in Los Angeles County Community Development Commission housing programs such as the Mortgage Credit Certificate Program for first-time homebuyers.

Responsible Department:	City Council
Funding source:	Community Development Commission/General Fund
Timeframe:	June 1996
Objective:	Not applicable

H OBJECTIVE 4.1: No net loss of affordable housing

H Policy 4.1.2: The City shall strive to maintain existing affordable housing stock.

H Policy 4.1.3: The City shall require property owners replace affordable housing lost by redevelopment

To implement these policies the City shall:

H Implementation Measure 24: Maintain a mobilehome park rent stabilization ordinance that regulates maximum allowable rents and limits rent increases.

Responsible Department:	City Manager/City Council
Funding source:	General fund/registration fees
Timeframe:	On-going
Objective:	No net loss of units

H Implementation Measure 25: Pursuant to the provisions of Government Code Section 65863.7, require the submittal of a report detailing the impacts of any proposed mobilehome park conversion to a nonresidential use concurrent with the filing of any discretionary permit on such property and impose reasonable mitigation measures upon the park owners.

Responsible Department:	City Council
Funding source:	General fund
Timeframe:	On-going
Objective:	Not applicable

H Implementation Measure 26: Establish a housing conservation program and provide incentives to rehabilitate existing housing, such as permit fee waivers for those units deed restricted for rent or sale as affordable to very low, low and moderate-income families.

Responsible Department:	City Council
Funding source:	General fund
Timeframe:	January 1997
Objective:	Not applicable

H Implementation Measure 27: In accordance with Government Code Section 65590, require the replacement of affordable units removed (either by demolition or conversion) from the coastal zone whenever feasible.

Responsible Department:	City Council
Funding source:	General fund
Timeframe:	January 1997
Objective:	No net loss of units

H Implementation Measure 28: Implement an incentives program to bring substandard housing into compliance, including establishing a rehabilitation assistance program and permit streamlining process.

Responsible Department:	City Council/Building Department
Funding source:	General fund/CDBG
Timeframe:	January 1999
Objective:	47 units rehabilitated

H Implementation Measure 29: Provide incentives (such as rehabilitation assistance, fee waivers and permit streamlining) for the repair, restoration, and/or reconstruction of existing, affordable housing units which are impacted by natural disaster or condemnation, especially units which accommodate very low, low and moderate income households, elderly, disabled, large families, single heads of households, farm workers, those in need of emergency shelter and other individuals or household types with special needs, except if those units are located in areas physically unsuitable for development.

Responsible Department:	City Council
Funding source:	General fund
Timeframe:	January 1997
Objective:	Not applicable

H Implementation Measure 30: Implement and encourage participation in the CDBG housing rehabilitation programs including the California HOME Program.

Responsible Department:	City Council
Funding source:	General fund
Timeframe:	January 1996
Objective:	Not applicable

H Implementation Measure 31: Establish a voluntary amnesty and legalization program for existing housing units in the City provided where:

- 1) the unit is "livable" and meets basic health and safety requirements;
- 2) the unit existed at the time of the City's incorporation; and
- 3) the unit is restricted for owner-occupancy or rental by very low, low or moderate-income persons at an affordable rate.

Responsible Department:	City Council
Funding source:	General fund
Timeframe:	April 1996
Objective:	5 units

H OBJECTIVE 5.1: Housing needs addressed regionally.

H Policy 5.1.2: The City shall initiate cooperation among neighboring jurisdictions and other public agencies to pool resources to meet regional housing needs.

H Policy 5.1.3: The City shall work to assure that responses to the regional housing problems are fairly allocated among the affected jurisdictions in the region.

To implement these policies the City shall:

H Implementation Measure 32: Explore possibility of cooperative agreements with agencies and other levels of government to provide emergency shelter.

Responsible Department:	City Manager/Council liaison to Westside Summit
Funding source:	General fund
Timeframe:	January 1997
Objective:	Not applicable

H Implementation Measure 33: Enter into an agreement with Los Angeles County Housing Authority or other appropriate agencies to operate a Fair Housing Program encompassing investigation of discrimination complaints, research on housing discrimination related issues, and public information about the rights and responsibilities of land owners and tenants. Promote availability of the program through the use of pamphlets and public bulletin board on community television.

Responsible Department:	City Attorney/Code Enforcement
Funding source:	Seek sources
Timeframe:	On-going
Objective:	Not applicable

H Implementation Measure 34: Work with Southern California Association of Governments to encourage an appropriate fair share allocation of regional housing demands based on population need, existing supply/demand, ability to accommodate growth given the physical/environmental constraints and the jobs-to-housing ratio.

Responsible Department:	City Manager/Council liaison to Westside Summit
Funding source:	General fund
Timeframe:	January 1997
Objective:	Not applicable

APPENDIX A: COMPARISON OF DEVELOPMENT FEES

The following provides information regarding various development fees for the City of Malibu and the County of Los Angeles. Three (3) different development scenarios are provided to illustrate the different fees for a single-family home.

Scenario A: This scenario assumes the development of single-family homes requiring approval of a General Plan amendment and corresponding zone change, a parcel map and other associated reviews. As illustrated below, the City's fees for this type of project is substantially less than the County of LA's fees for a comparable development.

Action	City of Malibu	County of Los Angeles
General Plan Amendment	\$2,205.00	\$2,567.00
Initial Study	\$ 150.00	\$ 369.00
Negative Declaration	\$ 250.00	(included in above)
Plot Plan Review	\$ 500.00	\$ 146.00 (\$325 for hillside lots with slopes greater than 25%)
Site Plan Review	\$ 500.00	\$ 146.00 (\$325 for hillside lots with slopes greater than 25%)
Subdivisions -		
Tent. Parcel Map	\$1,925.00	\$4,040.00
Final Parcel Map	\$ 500.00	\$ 300.00
Zoning Ordinance Amdt.	\$1,500.00	\$3,699.00
TOTAL	\$7,530.00	\$11,267.00 (\$11,625 for lots with slopes greater than 25%)

Scenario B: This scenarios assumes the development of single-family homes consistent with the site's General Plan designation and zoning. As illustrated below, the City's fees are less than fees that would be imposed by the County.

Action	City of Malibu	County of Los Angeles
Plot Plan Review	\$ 500.00	\$ 146.00 (\$325 for hillside lots with slopes greater than 25%)
Site Plan Review	\$ 500.00	\$ 146.00 (\$325 for hillside lots with slopes greater than 25%)
Subdivisions -		
Tent. Parcel Map	\$1,925.00	\$4,040.00
Final Parcel Map	\$ 500.00	\$ 300.00
TOTAL	\$3,425.00	\$4,632.00 (\$4,990 for lots with slopes greater than 25%)

Scenario C: This scenario assumes the development of a single-family home, with no other discretionary approval necessary.

Action	City of Malibu	County of Los Angeles
Plot Plan Review	\$ 500.00	\$146.00 (\$325 for hillside lots with slopes greater than 25%)
Site Plan Review	\$ 500.00	\$146.00 (\$325 for hillside lots with slopes greater than 25%)
TOTAL	\$1,000.00	\$292.00 (\$650 for hillside lots with slopes greater than 25%)

APPENDIX B: SOCIAL SERVICE PROVIDERS SERVING THE CITY OF MALIBU AND SURROUNDING AREAS

A. CITY OF MALIBU

The following organizations in the City of Malibu provide a variety of services to the community, including assistance to the homeless who seek help.

Religious Organizations

Serra Retreat: Does not have any organized provision of services, however, people are not turned away

Other Agencies/Groups

The Artifact Tree (thrift shop): Located at 3728 ^{1/2} Cross Creek, provides lunch meals to day laborers

B. SURROUNDING COMMUNITIES

In addition to the services provided in the City of Malibu, additional services to the homeless in the surrounding communities. The following provides information on some of these services.

City of Los Angeles (community of Venice)

Bible Tabernacle: Provides emergency shelter to single men, some single women and some families. Families are separated and boys over the age of approximately five are sent to the men's section. After two nights, men and boys are transferred to a shelter in Canyon Country in northeastern Los Angeles County. They do not give a capacity and the Health Department cites them often because people sleep on the floor.

City of Santa Monica

Sunlight: Christian oriented program which has a capacity of 128 persons. The shelter accepts children, families, couples, women with children, men with children, and single men and women.

Turning Point: Associated with the Ocean Park Community Center in Santa Monica. The shelter provides separate accommodations for men and women. There are 24 cots for men and 11 cots for women and the maximum permitted stay is two weeks.

Infoline: (800) 339-6993 (funded by the United Way and Los Angeles County)

Battered Women: (310) 392-8361

Overnight Shelters: OPCC Daybreak Shelter (for women)
(310) 450-0650

LIEU-CAP (women and children only)
(310) 453-3591

Oakwood Wesley House (women and children only)
(310) 392-5540

Our House-APLA (for HIV + /substance abuse)
(310) 384-5031

P.A.T.H.
(310) 996-0034

Sojourn Shelter (for battered women and children)
(310) 392-9896

Stepping Stone Shelter (runaway and homeless youths)
(310) 450-7839

Sundowners Shelter
(213) 974-1234

Turning Point
(310) 450-4050

Other services - day centers, food services, public showers, employment and training, alcohol and drug recovery and medical and health services - are also provided by a wide variety of public and private associations and agencies in the City of Santa Monica. Information on these services is available from the City of Santa Monica's Social Services Commission (310) 458-8701.

City of West Hollywood

Homeless Family Assistance: (213) 461-9532
West Hollywood Homeless Organization: (213) 650-4040
Infoline: (800) 333-9997
Food:

Romaine and Sycamore: Food line starts at 5:30 pm
Sova Food Pantry: 7536 1/2 Beverly Boulevard
(310) 828-8814
All Saints' Episcopal Church: 504 N. Camden Drive, Beverly Hills
Friday 3:00 pm - 5:00 pm
Lunch and walk-in services

Medical:

L.A. Free Clinic: 8405 Beverly Boulevard, Los Angeles
(213) 653-1990
USC Medical Center: (213) 226-2622

Appendices

Appendix A

Appendix A, continued

Appendix A, continued

Appendix A, continued

Appendix A, continued

Appendix A, continued

Appendix A, continued

Appendix A, continued

Appendix A, continued

Appendix A, continued

Appendix A

Appendix A, continued

Appendix A, continued

Appendix A, continued

Appendix A, continued

Appendix A, continued

Appendix A

APPENDIX A - GLOSSARY OF TERMS

The following glossary of terms is based on several sources. The sources for the glossary include the California Planning Roundtable, a non-profit association affiliated with the California Chapter of the American Planning Association. In addition, the glossary also includes terms and definitions developed by the League of California Cities and the City of Calabasas.

The purpose of this Glossary is to define the terms used to describe the City of Malibu's policy commitments.

Adaptive Reuse

The conversion of an existing building from one type of use to another type of use. The purpose of adaptive reuse is to encourage retaining the primary constructed structure while minimizing new construction. Examples include, but are not limited to the following: (a) converting a church sanctuary to a performing arts theater; (b) converting an elementary school to an office complex; © converting a gas station to a restaurant; (d) converting retail space to residential uses; and other similar conversions.

Adverse Impact

A negative consequence for the physical, social, or economic environment resulting from an action or project.

Adopt

Action will be undertaken to formulate policy, guidelines, or ordinances or revisions thereto. The expectation is that resources would be devoted to creating the policy, guidelines, ordinances, or revisions, and that they will be formally enacted by appropriate city decision makers.

Affordable Housing

Housing capable of being purchased or rented by a household with very low, low, or moderate income, based on a household's ability to make monthly payments necessary to obtain housing. Housing is considered affordable when a household pays less than 30 percent of its gross monthly income for housing including utilities.

Affordability Requirements

Provisions established by a public agency to require that a specific percentage of housing units in a project or development remain affordable to very low- and low-income households for a specified period.

Alluvial

Soils deposited by stream action.

Ambient

Surrounding on all sides; used to describe measurements of existing conditions with respect to traffic, noise, air and other environments.

Annex

To incorporate a land area into an existing district or municipality, with a resulting change in the boundaries of the annexing jurisdiction.

Applicant

A person proposing development (see proposed development)

Aquifer

An underground, water-bearing layer of earth, porous rock, sand or gravel, through which water can seep or be held in natural storage. Aquifers generally hold sufficient water to be used as a water supply.

Archaeological

Relating to the material remains of past human life, culture, or activities.

Articulation

Variation in the depth of the building plane, roof line, or height of a structure that breaks up plain, monotonous areas and creates patterns of light and shadow.

Avoid

To keep away from, or to prevent the occurrence or effectiveness. Development in areas to be avoided will be subject to additional conditions requiring mitigation of the impact of that development on public services, facilities and resources. Areas to be avoided would be among those included in the last phase of a growth management study.

Base Flood

In any given year, a 100-year flood that has 1 percent likelihood of occurring, and is recognized as a standard for acceptable risk.

Basic Biogeographic Planning Area

A geographic area which is united by common biological and geophysical processes, which creates a natural planning unit for evaluating and implementing natural resource protection. The basic biogeographic resource planning area for the Malibu coastal zone is defined as the individual watershed.

Biota

All the living organisms of a particular area; the combined flora and fauna of a region.

Blue Line Stream

Those drainage pathways identified by a "blue line" on U.S.G.S. topographic maps.

Bluff

A cliff, head land or hill with a broad steep face.

Buildout

Development of land to its full potential or theoretical capacity as permitted under the provisions of the General Plan.

Bulk Envelope

The space remaining on a site for structures after all building setback, height limit and bulk requirements.

California Environmental Quality Act (CEQA)

A state law requiring state and local agencies to regulate activities with consideration for environmental protection. If a proposed activity has the potential for a significant adverse environmental impact, an Environmental Impact Report (EIR) must be prepared and certified as to its adequacy before taking action of the proposed project.

Caltrans

California Department of Transportation.

Capital Improvement Program

A budgetary program that schedules the construction of public facilities to fit its fiscal capability some years into the future. Capital improvement programs are usually projected five or six years in advance and should be updated annually.

Carrying Capacity

The level of land use, human activity, or development for a specific area that can be accommodated permanently without an irreversible change in the quality of air, water, land, or plant and animal habitats. Carrying capacity also refers to the upper limits beyond which the quality of life, health, welfare, safety or community character within an area will be impaired.

Character

Special physical characteristics of a structure or area that set it apart from its surroundings and contribute to its individuality.

Circulation Element

One of the seven State-mandated elements of a local general plan, it contains adopted goals, policies, and implementation programs (or measures) for the planning and management of existing and proposed thoroughfares, transportation routes, and terminals, as well as local public utilities and facilities, all correlated with the land use element of the general plan.

Coastal Morphology

The biological characteristics of the coastal area, including the relationships between terrestrial and marine plants and animals in the coastal zone.

Commercial Strip

Commercial development, usually one store deep, that fronts on a major street for a distance, usually one block or more. Includes individual buildings on their own lots, with or without on-site parking, and small linear shopping centers with shallow on-site parking in front of the stores.

Common Open Space

Land within or related to a development, not individually owned or dedicated for public use, which is designed and intended for the common use or enjoyment of the residents of the development.

Community)

The recognizable unit of a given geographic area, produced by interaction of climatic factors, biota, and substrate, usually designated according to the characteristic adult or climax vegetation, such as, deciduous forest, grassland, chaparral, and the like.

Community Noise Equivalency Level (CNEL)

A 24-hour energy equivalent level derived from a variety of single-noise events, with weighing factors of 5 and 10 dBA applied to the evening (7 pm to 10 pm) and nighttime (10 pm to 7 am) periods, respectively, to allow for the greater sensitivity to noise during these hours.

Composting

The treatment of solid organic refuse through aerobic, biologic decomposition.

Congestion Management Plan (CMP)

A mechanism employing growth management techniques, including traffic level of service requirements, development mitigation programs, transportation systems management (TSM), and capital improvement programming, for the purpose of controlling and/or reducing the cumulative regional traffic impacts of development. AB 1791, effective August 1, 1990, requires all cities, and counties that include urbanized areas, to adopt and annually update a CMP.

Conservation Element

One of the seven State-mandated elements of a local general plan, it contains adopted goals, policies, and implementation programs for the conservation, development, and use of natural resources including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources.

Coordinate

Action will be taken to expend time and money in jointly pursuing an implementing activity with other entities. The expectation is that implementation will definitely result, and that it will be accomplished cooperatively with other organizations, possibly with the City in the lead.

Cumulative Effect or Cumulative Impact

"Cumulative impacts" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The incremental effects of an individual project are reviewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

dB

Decibel; a unit used to express the relative intensity of a sound as it is heard by the human ear.

dBA

The "A-weighted" scale for measuring sound in decibels; weighs or reduces the effects of low and high frequencies in order to simulate human hearing. Every increase of 10 dBA doubles the perceived loudness though the noise is actually ten times more intense.

Dedication

An action by a property owner which turns over private land for a public use, and its acceptance for such use by the government agency in charge of the public function for which it will be used. Dedications for streets, parks, school sites, or other public uses are often made conditions for the approval of a development.

Density Transfer

A process permitting unused allowable densities in one area to be used in another area. Where density transfer is permitted the average density over an area would remain constant, but allow internal variations. Within a single development, the result would normally be a clustering of buildings on smaller lots with some land retained as open space.

Development

The physical extension and/or construction of structures, subdivision of land, roads or other facilities, installation of septic systems; grading which requires a permit; and deposit of debris or fill materials. Additions to existing structures that do not exceed 10 percent of the original floor area, routine repair, maintenance and remodel are not "development".

Development (Proposed)

Development for which an application for approval/permits has been submitted to the City, but not yet approved.

Dispersion

A measure of the "scattering" of a component of water (e.g., pathogens or nitrates) in various directions.

District

(1) An area of a city or county that has a unique character identifiable as different from surrounding areas because of distinctive architecture, streets, geographic features, culture, landmarks, activities, or land uses. (2) A portion of the territory of a city or county within which uniform zoning regulations and requirements apply; a zone.

Disturbed Sensitive Resource Areas (DSRAs)

Those areas which would historically have met the Coastal Act definition of an environmentally sensitive habitat but which have been substantially modified as a result of coastal development. DSR's typically possess remnant biota which remain important biological resources.

Diversity

Differences among otherwise similar elements that give them unique forms and qualities, e.g., housing diversity can be achieved by differences in unit size, tenure, or cost.

Downzoning

A change in the zoning classification of land to a classification permitting development that is less intensive or dense, such as from multi-family to single-family or from commercial to residential. A change in the opposite direction is called "upzoning."

Drainfield

A means to finally treat and dispose of septic tank effluent by means of subsurface soil-absorption and adsorption. Also known as disposal field or leachfield.

Dwelling Unit

A room or group of rooms (including sleeping, eating, cooking and sanitation facilities, but not more than one kitchen), which constitutes an independent housekeeping unit, occupied or intended for occupancy by one household on a long-term basis.

Easement

The portion of a property for which access or use is allowed by a person or agency other than the owner.

Easement, Conservation

A tool for acquiring open space with less than full-fee purchase, whereby a public agency buys only certain specific rights from the land owner. These may be positive rights (providing the public with the opportunity to hunt, fish, or ride over the land), or they be restrictive rights (limiting the uses to which the land owner may devote the land in the future).

Ecology

The interrelationship of living things to one another and their environment; the study of organisms as affected by the factors of their environments.

Ecosystem

The fundamental unit in ecology, comprising the living organisms and the nonliving elements interacting in a certain defined area.

Effluent

Water, sewage, or any other liquid (partially treated or in its natural state) that is flowing out of a reservoir, septic tank, or treatment plant.

Eminent Domain

The legal right of government to acquire or take private property for public use or public purpose upon paying just compensation to the owner. While originally used

only when land was to be kept in public ownership, i.e., for highways, public buildings or parks, property has been condemned under eminent domain powers for private use in the public interest, such as urban renewal.

Encourage

The action will receive positive treatment in written policy, and will be transmitted as appropriate to influence others. In cases where the City can compel action, such as in the application review process, the City will commit resources to assist others to achieve the action or condition being encouraged. The expectation is that, to the extent that the action or condition meets both the objectives of the City and the other party, that the action or condition will occur. In cases where the City cannot compel the actions of others, encourage is synonymous with support.

Endangered Species

A species of animal or plant that is considered to be endangered when its prospects for survival and reproduction are in immediate jeopardy from one or more causes. Both the California Department of Fish and Game (pursuant to Title 14 of the California Administrative Code) and the U.S. Fish and Wildlife Service (pursuant to the Federal Endangered Species Act) identify endangered species.

Endemic

A species or habitat type that is restricted to a particular geographic area or soil type and which occurs in no other area..

Encroachment

Any obstruction or protrusion into a right-of-way or adjacent property, whether on the land or above it.

Enhance

To improve existing conditions by increasing the quantity or quality of beneficial uses or features. Action will be taken to improve existing conditions by increasing the quantity or quality of beneficial uses or existing actions. The expectation is that a desirable condition exists, and is to be improved by the action.

Ensure

Action will be taken to guarantee a certain outcome or result. The expectation is that, in guaranteeing a particular result, the City will commit resources, and has the legal right to compel other parties to take a particular action or perform in a prescribed manner.

Environmentally Sensitive Area or Environmentally Sensitive Habitat Area (ESHA)

Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments. Malibu's ESHAs include, but are not limited to, the following:

1. Those areas designated as such on the Sensitive Environmental Resources

and Marine Resources Maps.

2. Habitat for species and plant communities recognized as threatened or endangered by the state or federal governments; plant communities recognized by the State of California (in the Terrestrial Natural Communities Inventory) as restricted in distribution and very threatened; those habitat types of limited distribution recognized to be of particular habitat value including wetlands, riparian scrub, riparian woodlands, oak woodlands, and oak savannahs (Table 3-5).
3. Those areas designated by the County of Los Angeles as Significant Ecological Areas (SEAs) which meet the definition of environmentally sensitive habitat areas as defined in Section 30107.5 of the Coastal Act (Table 3-4).
4. Any areas which through professional biological evaluation meet the criteria enumerated in (2) and (3), above.
5. Those marine areas designated by the State of California as areas of Special Biological Significance (ASBS).

Evapotranspiration

The actual loss of water by evaporation from soil and water bodies as well as transpiration from plants.

Exclusionary Zoning

Zoning regulations which result in the exclusion of low- and moderate-income or minority persons from a community.

Expansive Soils

Soils which swell when they absorb water and shrink as they dry.

Feasible

Capable of being accomplished in a successful manner within a reasonable period of time taking into account economic, environmental, social, and technological factors.

Fiscal Impact Analysis

A projection of the direct public costs and revenues resulting from population or employment change to the local jurisdiction(s) in which the change is taking place. Enables local governments to evaluate relative fiscal merits of general plans, specific plans, or projects.

Flood - 100 Year (base flood)

The magnitude of a flood expected to occur on the average every 100 years, based on historical data. The 100-year flood has a 1/100, or one percent, change of occurring in any given year.

Flood Plain

The land area on either side of the banks of a stream regularly subject to flooding from any source. That part of the flood plan subject to a one percent chance of flooding in any given year is designated as a "area of special flood hazard" by the Federal Insurance Administration.

Floor-Area Ratio (FAR)

The gross floor area permitted on a site divided by the total net area of the site, expressed in decimals to one or two places. For example, on a site with 10,000 net sq. ft. of land area, a Floor-Area Ratio of 1.0 will allow a maximum of 10,000 gross sq. ft. of building floor area to be built. On the same site, a FAR of 0.5 would allow 5,000 sq. ft. of floor area; an FAR of 0.25 would allow 2,500 sq. ft.; and an FAR of 0.15 would allow only 1,500 sq. ft. Also, as commonly used in zoning, FARs typically are applied on a parcel-by-parcel basis to an average FAR for an entire land use or zoning district.

"Granny Flats"

A secondary housing unit, no greater than 1,200 sq. ft. in floor area, developed on a residential lot or parcel for the purpose of providing additional affordable housing opportunities, typically for extended elderly family members. Granny flats include kitchen and bathroom facilities.

Grasslands

Lands in which grasses are the predominant vegetation.

Greywater

"Wastewater" generated by household appliances and fixtures with the exception of the toilet, possibly the garbage grinder (garbage disposer), and non-bathing water bodies (jacuzzis, swimming pool, spas).

Ground Failure

Ground movement or rupture caused by strong shaking during an earthquake. Includes landslide, lateral spreading, liquefaction, and subsidence.

Ground Shaking

Ground movement resulting from the transmission of seismic waves during an earthquake.

Groundwater

Water under the earth's surface, often confined to aquifers capable of supplying wells and springs.

Ground Water Recharge

The natural process of infiltration and percolation of rainwater from land areas or streams through permeable soils into water-holding rocks which provide underground storage ("aquifers").

Growth Management

Policy for future growth to be controlled or otherwise regulated by various ordinances and programs. The land use element of the general plan identifies future growth, including both residential and non-residential development. Growth management is a process, through ordinances and programs, to ensure that the growth identified in the general plan's land use element occurs at a pace consistent with the agency's objectives.

Habitat

The physical location or type of environment in which an organism or biological population lives or occurs.

Heritage Tree

Any tree over 24" in dbh as a single trunk or multiple trunks that cumulatively add up to 24" dbh.

Hillside

Land which has an average percent of slope equal to or exceeding ten percent (10%).

Home Occupation

A commercial activity conducted solely by the occupants of a particular dwelling unit in a manner incidental to residential occupancy.

Hotel

A facility offering transient lodging accommodations to the general public and providing additional services, such as restaurants and meeting rooms.

Households, Number of

The count of all year-round housing units occupied by one or more persons. The concept of households is important because the formation of new households generates the demand for housing. Each new household formed creates the need for one additional housing unit or requires that one existing housing unit be shared by two households. Thus, household formation can continue to take place even without an increase in population, thereby increasing the demand for housing.

Household, Low-Income

A household with an annual income usually no greater than 80 percent of the area's median family income adjusted by household size, as determined by a survey of incomes conducted by a city or a county, or in the absence of such a survey, based on the latest available eligibility limits established by the U.S. Department of Housing and Urban Development.

Household, Moderate-Income

A household with an annual income between the lower income eligibility limits and 120 percent of the area's median family income adjusted by household size, as determined by a survey of incomes conducted by a city or a county, or in the

absence of such a survey, based on the latest available eligibility limits established by the U.S. Department of Housing and Urban Development.

Household, Very-low Income

A household with an annual income no greater than 50 percent of the area's median family income adjusted by household size, as determined by a survey of incomes conducted by a city or a county, or in the absence of such a survey, based on the latest available eligibility limits established by the U.S. Department of Housing and Urban Development for the Section 8 housing program.

Housing and Community Development, Department of (HCD)

The state agency that has principal responsibility for assessing, planning for, and assisting communities to meet the needs of very-low, low- and moderate-income households.

Housing Element

One of the seven State-mandated elements of a local general plan, it assesses the existing and projected housing needs of all economic segments of the community, identifies potential sites adequate to provide the amount and kind of housing needed, and contains adopted goals, policies, and implementation programs for the preservation, improvement, and development of housing. Under State law, Housing Elements must be updated every five years.

Impact

The effect of any direct man-made actions or indirect repercussions of man-made actions on existing physical, social or economic conditions.

Impact Fee

A fee, also called a development fee, levied on the developer of a project by a city, county or other public agency as compensation for otherwise-unmitigated impacts the project will produce. California Government Code Section 66000, *et. seq.*, specifies that development fees shall not exceed the estimated reasonable costs of providing the service for which the fee is charges. To lawfully impose a development fee, the public agency must verify its method of calculation and document proper restrictions on use of the fund.

Impervious Surface

Surface through which water cannot penetrate, such as roof, road, sidewalk, and paved parking lot. The amount of impervious surface increases with development and established the need for drainage facilities to carry the increased runoff.

Implementation Measures

Actions, procedures, programs, or techniques that carry out policies.

Incorporation

Creation of a new city.

Infill Development

The development of new housing or other buildings on scattered vacant sites in a built-up area. Infill development is usually considered the development of vacant parcels or lots in an area that is primarily developed.

Influent

Water, wastewater or other liquid flowing into a reservoir, basin or treatment plant.

Infrastructure

Includes, but is not limited to: road, schools, public utilities (such as water, natural gas, telephone, electricity, etc.), parks and playgrounds, waste disposal, sewers and/or septic systems.

Intertidal

That portion of the shore or structures in the ocean which is between high and low tide levels; the substrate and organisms in the intertidal are alternately covered by seawater and exposed to the air.

Jobs/Housing Balance; Jobs/Housing Ratio

The availability of affordable housing for employees. The jobs/housing ratio divides the number of jobs in an area by the number of employed residents. A ratio of 1.0 indicates a balance. A ratio greater than 1.0 indicates a net in-commute (that is, workers commute to the area because there are more jobs available than residents to fill the jobs); a ratio less than 1.0 indicates a net out-commute (that is, residents commute out of the area to find employment).

Joint Power Agency (JPA)

A legal arrangement that enables two or more units of government to share authority in order to plan and carry out a specific program or set of programs that serves both units of government.

Lagoon

A shallow lake or pond, especially one connected with a larger body of water.

Landmark

(1) A building, site, object, structure, or significant tree, having historical, architectural, social, or cultural significance and marked for preservation by the local, state, or federal government. (2) A visually prominent or outstanding structure or natural feature that functions as a point of orientation or identification.

Landslide

Downslope movement of soil and/or rock, which typically occurs during an earthquake or following heavy rainfall.

Lateral Spreading

Lateral movement of soil, often as a result of liquefaction during an earthquake.

Level of Service (LOS)

A scale that measures the amount of traffic a roadway may be capable of handling on a roadway segment or at an intersection of roadways; typically measured by a ratio of traffic volume to roadway capacity (V/C), as follows:

Level of Service A - indicates a relatively free flow of traffic, with little or no limitation on vehicle movement or speed; the V/C is 0.60 or less.

Level of Service B - describes a steady flow of traffic, with only slight delays in vehicle movement and speed. All queues clear in a single signal cycle; the V/C is 0.61 to 0.70.

Level of Service C - denotes a reasonably steady, high-volume flow of traffic, with some limitations on movement and speed, and occasional backups on critical approaches; V/C is 0.71 to 0.80.

Level of Service D - denotes the level where traffic nears an unstable flow. Intersections still function, but short queues develop and cars may have to wait through one cycle during short peaks; V/C is 0.81 to 0.90.

Level of Service E - describes traffic characterized by slow movement and frequent (although momentary) stoppages. This type of congestion is considered severe, but is not uncommon at peak traffic hours, with frequent stopping, long-standing queues, and blocked intersections; V/C is 0.91 to 1.00.

Level of Service F - describes unsatisfactory stop-and-go traffic characterized by "traffic jams" and stoppages of long durations. Vehicles at signalized intersections usually have to wait through one of more signal changes, and "upstream" intersections may be blocked by the long queues; V/C is greater than 1.00.

Some communities in California are developing standards for levels of services relating to municipal functions, such as police, fire, and library service. These standards are incorporated in the general plan or in separate "Level of Service Plans."

Liquefaction

The transformation of loose, wet soil from a solid to a liquid state, often as a result of ground shaking during an earthquake.

Littoral

A segment of coast that has definable sand sources and sand sinks, and into which and out of which the quantity of sand moving along the coast is known. Most littoral cells are bounded on either end by complete barriers to the long shore movement of sand.

Local Agency Formation Commission (LAFCo)

A five member commission within each county that reviews and evaluates all proposals for formation of special districts, incorporation of cities, annexations to special districts or cities, consolidation of districts, and merger of districts with cities. Each county's LAFCo is empowered to approve, disapprove or conditionally approve such proposals. The five LAFCo members generally include two county supervisors, two city council members and one member representing the general public. Some LAFCos include members who are directors of special districts.

Maintain

Action will be taken to continue ongoing City programs or services. The expectation is that active means may be employed to continue such programs or services.

Marine Area of Special Biological Significance (MASBS)

An area designated by the State Water Resources Control Board requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable.

Minimize

Action will be taken to reduce or lessen, but not necessarily eliminate, an existing condition or action to the greatest feasible extent. The expectation is that positive action will be undertaken to improve existing conditions by reducing the negative consequences of a particular situation.

Mitigate

Action will be taken to ameliorate, alleviate, or avoid to the extent feasible, an undesirable situation or consequence of action. The expectation is that negative consequences will be reduced to a level of insignificance.

Mitigation

Actions, improvements, features, modifications or requirements intended to eliminate or reduce the significant environmental effects of a project.

Mixed-Use Development

The development of a tract of land, parcel or building with two or more different uses. Mixed-use zoning permits a combination of usually separate uses within a single development or building.

Motel

A group of attached or detached buildings containing guest rooms, some or all of which have a separate entrance leading directly from the outside of the building to automobile parking space conveniently located on the lot or parcel of land and which is designed, used or intended to be used wholly or in part for the accommodation of automobile transients.

Natural Pollutant Discharge Elimination System (NPDES)

Standards for waste discharges from point and non-point sources to surface waters (rivers, lakes, bays, oceans, etc.) controlled by state or federal agencies under provisions of the federal Clean Water Act.

Native Plant

Any plant indigenous to the Santa Monica Mountains and its Coastal Region, existing before European settlement, as identified in the Flora of the Santa Monica Mountains (Raven, Thompson, and Prigge, 1986. Southern California Botanists Special Publication #2).

Neighborhood

A planning area commonly identified as such in a community's planning documents, and by the individuals residing and working within the neighborhood. Documentation may include a map prepared for planning purposes, on which the names and boundaries of the neighborhood are shown.

Noise Element

One of the seven state-mandated elements of a local general plan, it assesses noise levels of highways and freeways, local arterials, railroads, airports, local industrial plants, and other ground stationary sources, and adopts goals, policies, and implementation programs to reduce the community's exposure to noise.

Open Space Element

One of the seven State-mandated elements of a local general plan, it contains an inventory of privately and publicly owned open-space lands, and adopted goals, policies, and implementation programs for the preservation, protection, and management of open space lands.

Open Space, Public

Open space is any parcel of land or water which is essentially in its natural condition, and is devoted to an open space use for the purposes of: (a) preservation of natural resources; (b) managed production of resources; (c) outdoor recreation; or (d) public health and safety. "Public open space" is open space that is owned by a public agency and available to the public.

Ordinance

A law, or regulation, set forth and adopted by a governmental authority, usually a city or a county.

Overlay Zone

A specifically defined area wherein a set of zoning requirements in addition to those of the underlying district apply. Developments within an overlay zone must conform to the requirements of both zones or the more restrictive of the two. It usually is employed to deal with special physical characteristics such as flood plains or historical areas.

Pathogen

An organism or virus producing or capable of producing a disease (e.g., polio virus).

Payment in lieu

Payments of cash which are authorized in subdivision regulations when requirements for mandatory dedication of land cannot be met because of physical conditions of the site or other reasons.

Peak Hour/Peak Period

For any given roadway, a daily period during which traffic volume is highest, usually occurring in the morning and evening commute periods. Where "F" Levels of Service are encountered, the "peak hour" may stretch into a "peak period" of several hours' duration.

Percolation

The downward movement of water through porous soils or filtering medium. The liquid may or may not fill all the pores of the medium.

Planned Development (P-D)

A self-contained development, often with a mixture of land uses and densities, in which the subdivision and zoning controls are applied to the project as a whole rather than to individual lots. Commercial and even industrial uses are combined with different types of residential uses. A planned development with just residential uses is referred to as "residential planned development" (RP-D).

Planned Unit Development (PUD)

Land use zoning which allows the adoption of a set of development standards that are specific to a particular project. PUD zones usually do not contain detailed development standards; those are established during the process of considering proposals and adopted by ordinance upon project approval.

Plant Community

A recognizable combination of native or naturalized plant species that is produced by the interaction of climate, biota, and substrata and is usually designated according to the characteristic adult climate vegetation.

Policy

A statement of principle or of guiding actions which implies clear commitment but does not mandate specific actions. A general direction that the City sets to follow in order to meet its goals and objectives which direction is realized through implementation measures.

Pollution, Non-point source

In reference to water quality, sources for pollution which can not be traced to a single source location and usually cover broad areas of land, and which are primarily carried from the land by runoff to receiving waters. Examples include

fertilizers from agricultural land and petrochemicals from roads and parking lots.

Pollution, Point source

In reference to water quality, a discrete source from which pollution is generated before it enters receiving waters, such as a sewer outfall, a smokestack, or an industrial waste pipe.

Preserve

Action will be taken to maintain beneficial uses or features in their present condition as nearly as possible. The expectation is that the feature itself will endure over time as the result of that action.

Prohibit, Prevent

Action will be taken to compel others not to take a particular action or perform in a prescribed manner. The expectation is that the City will commit resources, and has the legal right to compel other parties in this manner.

Promontory

A high point of land or rock projecting into a body of water or a mass of land overlooking or projecting into a lowland.

Proposed Development

See Development

Protect

Action will be taken to keep a feature safe from destruction or decay, or to keep that feature intact. The expectation is that the positive qualities of that feature will endure over time as the result of the action.

RPA

Resource Protection Area

Rare

To be scarce or uncommon, or of limited distribution.

Rare or Endangered Species

A species of animal or plant listed in: Section 670.2 or 670.5, Title 14, California Administrative Code; or Title 50, Code of Federal Regulations, Section 17.11 or Section 17.2, pursuant to the Federal Endangered Species Act designating species as rare, threatened or endangered.

Reclaim

To bring back to a natural condition.

Reclamation

The reuse of resources, usually those present in solid wastes or sewage.

Recreation, Passive

Type of recreation or activity which does not require the use of organized play areas.

Recreation, Active

A type of recreation or activity which requires the use of organized play areas including, but not limited to, softball, baseball, football and soccer fields, tennis and basketball courts, and various forms of children's play equipment.

Remodel

The upgrade of the interior or exterior faces of a building or structure without altering the existing foundation, footprint or building envelope. Remodeling may include the replacement of exterior walls within the limitations described herein and according to the requirements of the Building Code provided that such remodeling can meet the standards for zone clearance or plot plan review.

Retrofit

To add materials and/or devices to an existing building or system to improve its operation, safety, or efficiency. For example, buildings have been retrofitted to use solar energy and to strengthen their ability to withstand earthquakes.

Resource Protection Area

A geographic area which contains significant natural resources that have been identified in the Conservation Element of the Malibu General Plan and for which specific resource protection policies have been established. Resource protection areas in the Malibu coastal zone include Environmentally Sensitive Habitat Areas (ESHAs), Significant Watersheds, Wildlife Habitat Linkages, Disturbed Sensitive Resource Areas (DSRAs), and Blueline Streams.

Ridgeline

A line connecting the highest points along a principal ridge separating watershed areas.

Riparian

Habitat occurring along the bank of a natural and freshwater waterway (e.g., river, stream or creek) which provides for high density, diversity and productivity of plant and animal species.

Riparian Areas

Areas that contain vegetation adapted to basic soil conditions adjacent to perennial and intermittent streams. Riparian areas are delineated by the existence of plant species normally found near freshwater.

Riparian Corridor

The band of riparian vegetation which occurs along perennial or intermittent stream courses.

Runoff

That portion of rain or snow which does not percolate into the ground and runs over the ground onto abutting property or is discharged into streams.

Rural

Respect for nature; proximity and ease of access to the shore, ocean and mountains; a sense of open space, residential privacy and closeness to nature from within and without the dwelling; predominance of natural topography and vegetation over the built environment creating the feeling, scent, sound and visual presence of "country"; low-density and low-intensity land uses subordinate to the natural setting; a non-urban environment characterized by the minimization of urban services and facilities; and unobtrusive commercial signs as well as low levels of artificial light and sound.

Safety Element

One of the seven state-mandated elements of a local general plan, it contains adopted goals, policies, and implementation programs for the protection of the community from any unreasonable risks associated with seismic and geologic hazards, flooding, and wildland and urban fires. Many safety elements also incorporate a review of police needs, objectives, facilities, and services.

SEA

See Significant Ecological Area

Scenic Highway/Route

A highway, road, drive or street which, in addition to its transportation function, provides opportunities for the enjoyment of natural and man-made scenic resources and access or direct views to areas or scenes of exceptional beauty or historic or cultural interest. The aesthetic values of scenic routes often are protected and enhanced by regulations governing the development of property or the placement of outdoor advertising.

Second Unit

A self-contained living unit, either attached to or detached from, and in addition to, the primary residential unit on a single lot; sometimes called "Granny Flat."

Seepage Pit

When the shape of the drainfield receiving septic tank effluent is a cylindrical excavation, the drainfield is called a seepage pit.

Seiche

An earthquake-generated wave in an enclosed body of water such as a lake, reservoir, or bay.

Sensitive

An adjective for plant or animal life or their habitats which are either rare or especially valuable because of their nature or role in an ecosystem and which could

be easily disturbed or degraded by human activities and development.

Service

Includes, but is not limited to: police/sheriff, fire, libraries, and city administration.

Shall

The action referred to is mandatory, and there is a positive obligation to undertake the action (see also definition of policy).

Significant Ecological Areas

Lands designated by Los Angeles County as ecologically fragile or important areas which are valuable as plant or wildlife habitat. See Environmentally Sensitive Habitat Area (ESHA) definition.

Significant Oak Woodlands and Oak Savannahs

Defined as oak woodlands (non-riparian) or oak savannahs located outside the major riparian woodland corridors. These are considered to be an Environmentally Sensitive Habitat Area.

Significant Watersheds

Those watershed which contain significant development of environmentally sensitive riparian or woodland habitat; those watershed which drain a watershed area of greater than 1 square mile; or those from which runoff could impact particularly sensitive marine resource areas. These include but are not limited to: Arroyo Sequit, Zuma Canyon, Solstice Canyon, Corral Canyon, Malibu Canyon, Tuna Canyon, Trancas Canyon, Ramirez Canyon, Las Flores Canyon, Encinal Canyon, San Nicholas Canyon, Los Alisos (Decker) Canyon, LaChusa Canyon, Escondido Canyon, Latigo Canyon, Puerco Canyon, Carbon Canyon, Topanga Canyon and its tributaries.

Solid Waste

Any unwanted or discarded material that is not a liquid or gas. Includes organic wastes, paper products, metals, glass, plastics, cloth, brick, rock, soil, leather, rubber, yard wastes, and wood, but does not include sewage and hazardous materials. Organic wastes and paper products comprise about 75 percent of typical urban solid waste.

Specific Plan

A plan adopted by a city or county to implement their adopted general plan for a specifically designated area. It contains the locations and standards for land use densities, streets, and other public facilities in greater detail than the general plan map and text.

Sphere of Influence

The probable ultimate physical boundary and service limits of a local agency as approved by the Local Agency Formation Commission (LAFCo). It identifies the

area available to a city for future annexation. However, unless another arrangement has been made with LAFCo, the city has no actual authority over such area outside its city limits.

Storm Runoff

Surplus surface water generated by rainfall that does not seep into the earth but flows overland to flowing or stagnant bodies of water.

Stringline Rule

A line drawn between the nearest adjacent corners of the adjacent structures. Separate stringlines shall be drawn for both enclosed living spaces and decks. Enclosed living spaces and decks shall not extend farther than the applicable stringline at any point along the stringline. Within infill areas, the Planning Director shall determine the applicable properties to be utilized in the event that the nearest properties create an unreasonable hardship on development of an infill lot.

Subdivision

The division of a tract of land into defined lots, either improved or unimproved, which can be separately conveyed by sale or lease, and which can be altered or developed. "Subdivision" includes a condominium project (as defined in Section 1350 of the California Civil Code) and a community apartment project (as defined in Section 11004 of the Business and Professions Code).

Subsidence

The sudden sinking or gradual downward settling and compaction of soil and other surface material with little or no horizontal motion. Subsidence may be caused by a variety of human and natural activity, including earthquake

Support

The action will receive positive treatment in written policy, but will receive no further action or commitment of resources other than transmitting the policy as appropriate to influence others to take specific actions.

Synergistic

Acting together, enhancing the effect of another force or entity, wherein the combined effect is greater than the sum of their individual effects.

Terrestrial

Land living or dwelling plants or animals.

Thermal Mass

Large quantities of heavy or dense material with a high heat capacity, used in solar buildings to absorb heat, which is then stored and re-radiated as needed for heating and cooling.

Tidepool

Pools of the rocky intertidal left behind by the receding tide.

Transportation Demand Management (TDM)

A strategy for reducing demand on the road system by reducing the number of vehicles using the roadways and/or increasing the number of persons per vehicle. TDM attempts to reduce the number of persons who drive along on the roadway during the commute period and to increase the number in carpools, vanpools, buses and trains, walking and biking. TDM can be an element of TSM (see below).

Transportation Management System (TSM)

A comprehensive strategy developed to address the problems caused by additional development, increasing trips, and a shortfall in transportation capacity. TSM focuses on more efficiently utilizing existing highway and transit systems rather than expanding them. TSM measures are characterized by their low costs and quick implementation time frame, such as computerized traffic signals, metered freeway ramps, and one-way streets.

Transfer of Development Rights (TDR)

Development rights are separated from the land in an area in which a community wishes to limit development. The concept permits these rights to be sold for use in an area desirable for development. It has been promoted as a way to retain farmland, preserve endangered natural environments, protect historic areas, stage development, promote low- and moderate-income housing, and achieve other land-use objectives.

Trip Generation

The dynamics that account for people making trips in automobiles or by means of public transportation. Trip generation is the basis for estimating the level of use for a transportation system and the impact of additional development or transportation facilities on an existing, local transportation system. Trip generations of households are correlated with destinations that attract members for specific purposes.

Tsunami

A great change in sea-level, usually manifested as a wave, caused by submarine earth movement or volcanic eruption.

Vehicle Trip

A one-way journey that proceeds from an origin to a destination via a single mode of transportation; the smallest unit of movement considered in transportation studies. Each trip has one "production end" (or origin, usually from home but not always) and one "attraction end" (or destination).

View Corridor

The line of sight --- identified as to height, width, and distance --- of an observer looking toward an object of significant to the community (e.g., ridgeline, river,

historic building, etc.); the route that directs the viewers attention.

Viewshed

The area within view from a defined observation point.

Visitor-Serving

Non-residential land uses (included but not limited to restaurants, stores, motels, etc.) that are primarily oriented to visitors to the City of Malibu.

Volume-to-Capacity Ratio (V/C)

A measure of the operation capacity of a roadway or intersection, in terms of the number of vehicles passing through, divided by the number of vehicles that theoretically could pass through when the roadway or intersection is operating at its designed capacity. Abbreviated as "V/C." At V/C ratio 1.0, the roadway or intersection is operating at capacity. If the ration is less than 1.0, the traffic facility has additional capacity. Although rations slightly greater than 1.0 are possible, it is more likely that the peak hour will elongate into a "peak period." (See "Peak Hour" and "Level of Service.")

Wastewater Irrigation

The process by which wastewater that has undergone appropriate treatment is used to irrigate land.

Watershed

The total area above a given point on a watercourse that contributes water to its flow; the entire region drained by a waterway or watercourse which drains into a lake, ocean or reservoir.

Wave Uprush Study

A study that identifies the potential area that would be inundated along the coast from ocean waves, accounting for the typical wave height of typical storms. The purpose of the study is to identify areas that may be affected by and potentially at-risk from ocean waves.

Wetland

Lands which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, fens, and perennial streams.

Wildlife Habitat Linkages

Areas of relatively undeveloped open space which, by virtue of their geographic location or habitat characteristics, have the potential to facilitate wildlife or plant migration between major habitat areas in the Malibu Coastal Zone including Topanga State Park, Malibu Creek State Park, Zuma/Trancas, Leo Carrillo and Mugu State Park. They are identified on Figure CO-3 of the Conservation Element of the Malibu General Plan.

Zoning

A measure enacted by a city or county to divide a community into districts or zones within which permitted an special uses are established, as well as regulations governing lot size, building bulk, placement and other development standards. Requirements vary from district to district, but they must be uniform within districts. The zoning ordinance consists of two parts: the text and the map. Zoning a program to implement policies of the general plan.

Zoning Map

Government Code Section 65851 permits a legislative body to divide a county, a city or portions thereof, into zone of the number, shape, and area it deems best suited to carry out the purposes of the zoning ordinance. These zones are delineated on a map, or maps, called the "Zoning Map."

**CITY OF MALIBU GENERAL PLAN
GLOSSARY of ABBREVIATIONS**

AAQS	Ambient Air Quality Standards
ADT	Average daily trips made by vehicles in a 24-hour period
AQMD	South Coast Air Quality Management District
AQMP	South Coast Air Quality Management Plan
ASB	Marine Areas of Special Biological Significance
BMP	Best Management Practices
BPO	Business-Professional Office
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CC	Commercial, Community
CC&Rs	Codes, Covenants and Restrictions
CDBG	Community Development Block Grant
CEQA	California Environmental Quality Act
CG	Commercial, General
CIP	Capital Improvements Program
CMP	Congestion Management Plan
CN	Commercial, Neighborhood
CNEL	Community Noise Equivalent Level
CR	Commercial, Recreational
CUP	Conditional Use Permit
CV	Commercial, Visitor
dB	Decibel
dBA	Decibels on the "A-weighted" decibel scale
DEIR	Draft Environmental Impact Report
DSRA	Disturbed Sensitive Resource Area
ESHA	Environmentally Sensitive Habitat Area
FAR	Floor Area Ratio
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FHA	Flood Hazard Area
FHwA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
HCD	California Department of Housing and Community Development
HOU	High Occupancy Vehicle
I	Institutional
ITE	Institute of Transportation Engineers
JPA	Joint Powers Authority
LAFCo	Local Agency Formation Commission
LCP	Local Coastal Program
Ldn	Day and Night Average Sound Level

Leq	Sound Energy Equivalent Level
LOS	Level of Service
LUP	Land Use Plan
MCFZ	Malibu Coastal Fault Zone
MCZ	Malibu Coastal Zone
MF	Multi-family
MH	Mobile Home
MLC	Malibu Littoral Cell
MRU	Mixed Residential Use
MTA	Metropolitan Transportation Authority
MWD	Metropolitan Water District of Southern California
NPDES	National Pollution Discharge Elimination System
OPR	Office of Planning and Research, state of California
OS	Open Space
PCH	Pacific Coast Highway
PRF	Private Recreational Facility
PUD	Planned Unit Development
RPA	Resource Protection Area
RR	Rural Residential
RR1	Rural Residential, 1 unit/acre
RR2	Rural Residential, 1 units/2 acres
RR5	Rural Residential, 1 unit/5 acres
RR10	Rural Residential, 1 unit/10 acres
RR20	Rural Residential, 1 units/20 acres
RVP	Recreational Vehicle Park
RWQCB	Regional Water Quality Control Board
SCAG	Southern California Association of Governments
SCE	Southern California Edison Company
SCS	Soil Conservation Service
SEA	Significant Ecological Areas
SF-L	Single-family, Low
SF-M	Single-family, Medium
SMARA	Surface Mining and Reclamation Act
SMMNRA	Santa Monica-Malibu National Recreational Area
SP	Specific Plan overlay
TDM	Transportation Demand Management
TDR	Transfer of Development Rights
TSM	Transportation Systems Management
TWRF	Tapia Water Reclamation Facility
UBC	Uniform Building Code
USGS	U.S. Geological Service
VMT	Vehicle Miles Traveled
V/C	Volume-to-Capacity Ratio



12425463

100	Volume-to-Capacity Ratio	100
101	Volume-to-Capacity Ratio	101
102	Volume-to-Capacity Ratio	102
103	Volume-to-Capacity Ratio	103
104	Volume-to-Capacity Ratio	104
105	Volume-to-Capacity Ratio	105
106	Volume-to-Capacity Ratio	106
107	Volume-to-Capacity Ratio	107
108	Volume-to-Capacity Ratio	108
109	Volume-to-Capacity Ratio	109
110	Volume-to-Capacity Ratio	110
111	Volume-to-Capacity Ratio	111
112	Volume-to-Capacity Ratio	112
113	Volume-to-Capacity Ratio	113
114	Volume-to-Capacity Ratio	114
115	Volume-to-Capacity Ratio	115
116	Volume-to-Capacity Ratio	116
117	Volume-to-Capacity Ratio	117
118	Volume-to-Capacity Ratio	118
119	Volume-to-Capacity Ratio	119
120	Volume-to-Capacity Ratio	120
121	Volume-to-Capacity Ratio	121
122	Volume-to-Capacity Ratio	122
123	Volume-to-Capacity Ratio	123
124	Volume-to-Capacity Ratio	124
125	Volume-to-Capacity Ratio	125
126	Volume-to-Capacity Ratio	126
127	Volume-to-Capacity Ratio	127
128	Volume-to-Capacity Ratio	128
129	Volume-to-Capacity Ratio	129
130	Volume-to-Capacity Ratio	130
131	Volume-to-Capacity Ratio	131
132	Volume-to-Capacity Ratio	132
133	Volume-to-Capacity Ratio	133
134	Volume-to-Capacity Ratio	134
135	Volume-to-Capacity Ratio	135
136	Volume-to-Capacity Ratio	136
137	Volume-to-Capacity Ratio	137
138	Volume-to-Capacity Ratio	138
139	Volume-to-Capacity Ratio	139
140	Volume-to-Capacity Ratio	140
141	Volume-to-Capacity Ratio	141
142	Volume-to-Capacity Ratio	142
143	Volume-to-Capacity Ratio	143
144	Volume-to-Capacity Ratio	144
145	Volume-to-Capacity Ratio	145
146	Volume-to-Capacity Ratio	146
147	Volume-to-Capacity Ratio	147
148	Volume-to-Capacity Ratio	148
149	Volume-to-Capacity Ratio	149
150	Volume-to-Capacity Ratio	150
151	Volume-to-Capacity Ratio	151
152	Volume-to-Capacity Ratio	152
153	Volume-to-Capacity Ratio	153
154	Volume-to-Capacity Ratio	154
155	Volume-to-Capacity Ratio	155
156	Volume-to-Capacity Ratio	156
157	Volume-to-Capacity Ratio	157
158	Volume-to-Capacity Ratio	158
159	Volume-to-Capacity Ratio	159
160	Volume-to-Capacity Ratio	160
161	Volume-to-Capacity Ratio	161
162	Volume-to-Capacity Ratio	162
163	Volume-to-Capacity Ratio	163
164	Volume-to-Capacity Ratio	164
165	Volume-to-Capacity Ratio	165
166	Volume-to-Capacity Ratio	166
167	Volume-to-Capacity Ratio	167
168	Volume-to-Capacity Ratio	168
169	Volume-to-Capacity Ratio	169
170	Volume-to-Capacity Ratio	170
171	Volume-to-Capacity Ratio	171
172	Volume-to-Capacity Ratio	172
173	Volume-to-Capacity Ratio	173
174	Volume-to-Capacity Ratio	174
175	Volume-to-Capacity Ratio	175
176	Volume-to-Capacity Ratio	176
177	Volume-to-Capacity Ratio	177
178	Volume-to-Capacity Ratio	178
179	Volume-to-Capacity Ratio	179
180	Volume-to-Capacity Ratio	180
181	Volume-to-Capacity Ratio	181
182	Volume-to-Capacity Ratio	182
183	Volume-to-Capacity Ratio	183
184	Volume-to-Capacity Ratio	184
185	Volume-to-Capacity Ratio	185
186	Volume-to-Capacity Ratio	186
187	Volume-to-Capacity Ratio	187
188	Volume-to-Capacity Ratio	188
189	Volume-to-Capacity Ratio	189
190	Volume-to-Capacity Ratio	190
191	Volume-to-Capacity Ratio	191
192	Volume-to-Capacity Ratio	192
193	Volume-to-Capacity Ratio	193
194	Volume-to-Capacity Ratio	194
195	Volume-to-Capacity Ratio	195
196	Volume-to-Capacity Ratio	196
197	Volume-to-Capacity Ratio	197
198	Volume-to-Capacity Ratio	198
199	Volume-to-Capacity Ratio	199
200	Volume-to-Capacity Ratio	200